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The project provided for the 2nd year of operation of a special education diagnostic and resource center, special classes, and supportive services for handicapped children and youth between the ages of 3 and 21. Cooperation was obtained from existing community agencies, participating school districts, and local private practitioners. Center staff included coordinators, psychologists, social workers, a librarian for the visually handicapped, a peripatologist, and consultants in art, music, and physical education. The supplementary classroom program provided placement in the following categories: learning disabilities, hearing handicapped, severely orthopedically handicapped, trainable mentally handicapped, emotionally disturbed, and Negro underachievers. Counseling services for parents, consultative services for supplementary or regular classrooms, resource materials and equipment, and materials and equipment for the visually handicapped and blind were also provided. Both test and non-test sources of data were used to evaluate the project; teacher ratings and consultant reports indicated that most of the pupils were improving in attitudes, skill areas, and group functioning. Of the 131 pupils served in supplementary classrooms, 28 were returned to regular class programs. Teaching methods are reported in case studies. (LE)

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EVALUATION REPORT

1967 - 68

Special Education Diagnostic And Resource Center Project

ESEA TITLE III

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Division of Plans and Supplementary
Centers [illegible]

12/30/68

Unified School District 259
Wichita, Kansas
October, 1968

EC 003 459

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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ESEA TITLE III EVALUATION REPORT

SPECIAL EDUCATION DIAGNOSTIC AND RESOURCE CENTER PROJECT

1967 - 68

Project No. 66-1090

Submitted to the U.S. Office of Education

By
Board of Education, Unified School District 259
428 South Broadway, Wichita, Kansas 67202

October 1968

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Wichita, Kansas

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ABSTRACT OF ESEA TITLE III EVALUATION REPORT 1967-68

The Title III project provided for the second year of operation a diagnostic and resource center, special classes, and supportive services for handicapped children and youth. Additional services were provided for visually handicapped and blind students.

Both test and non-test sources of data were used in discovering the extent to which objectives were reached. Tests were used in assessing progress in academic achievement, mental maturity, and physical fitness. Records of various kinds, case histories, rating scales, and questionnaires were used to provide additional information.

Evaluative and diagnostic services were provided to facilitate the proper educational placement and/or therapy for handicapped children. Services were provided through existing agencies and private practitioners on a contractual basis. An additional large number of referrals were processed by the center during the year. Reactions received from school personnel, parents, and agency representatives indicated that a high degree of success was attained and the services provided were of value.

Supportive services were provided in the following areas: counseling services for parents and others, consultative services for supplementary and/or regular classrooms, resource materials and equipment, materials, and equipment for visually handicapped and blind, and provision of mobility orientation for the blind. Favorable reactions regarding these services were received from parents, teachers and others who received these services. The most favorable reactions received concerned counseling and psychological and medical services provided for parents regarding special needs of their children, the supportive services provided by the consultants in the supplementary classroom program, and some of the in-service training programs provided for school personnel.

The supplementary classroom program provided placement in six different categories of handicaps. Evidence of academic gain was shown in some classrooms according to pretest and posttest evaluation devices. Teacher ratings and consultant reports indicated most of the pupils were improving in attitudes, skill areas, and functioning in group activities. Evidence of pupil adjustment was further shown by having twenty-eight of the pupils in the supplementary classroom program phased back into regular classroom programs.

Experimental efforts were limited to some extent due to lack of appropriate facilities and time commitments of personnel in the project. One experiment dealing with preferred sound level intensity was conducted and reported by a consultant. Some teaching methods and procedures were beginning to appear effective and were reported primarily in case studies of individual pupils. Principals and other school personnel in the project area indicated usage of materials and procedures presented through in-service training programs.

At this point, it appears that a school oriented center can effectively coordinate activities involving parents, school personnel, community agencies, and practitioners in providing services and educational programs for handicapped pupils not ordinarily served in a regular classroom setting. A continued follow-up of pupils who have been served by the project should provide further evidence of the effects of the project.

PART 1

INTRODUCTION

The Title III project in the greater Wichita area provided a special education diagnostic and resource center for the second year of operation. This center has a responsibility of coordinating school and community services for handicapped children and youth. Activities included in the project are: (1) creating an awareness of need for appropriate programs throughout the area served, (2) developing highly specialized diagnostic supportive services, (3) establishing supplementary programs for handicapped pupils, and (4) implementing a continuous experimental and evaluative program.

Handicapped children and youth are defined as persons ages 3 - 21 who are educationally, mentally, emotionally, socially, or physically impaired to the extent that progress in an existing program can not be made at a rate expected of most children in that age group. Services provided by the center embodied psychological, medical, and social evaluations, counseling, consultative and therapeutic activities, and assistance in operation of a supplemental classroom program for handicapped pupils.

The project area served by the diagnostic and resource center included thirteen unified school districts as well as thirty private and parochial schools. Sedgwick County and portions of six adjacent counties were involved, with public and nonpublic schools participating. A total pupil population of approximately 100,000 was served in the project area.

OBJECTIVES OF ESEA TITLE III PROJECT

1. To provide evaluative and diagnostic services to facilitate the proper educational placement and therapy of handicapped children and youth.
2. To provide supportive services to enable handicapped children and youth to enter, remain in, or reenter appropriate educational or training programs.
3. To provide supplemental programs for severely handicapped children and youth.
4. To discover effective child study and child adjustment procedures for handicapped children and youth.

PROCEDURES FOR ATTAINING OBJECTIVES

An existing structure, a previously used school building, was utilized as a Special Education Diagnostic and Resource Center. Professional personnel housed in this structure included the center coordinator, a coordinator for psychologically handicapped, a coordinator for physically handicapped, staff school psychologists (two positions), social worker (two positions), art consultant, music consultant, physical education consultant, resource materials consultant, librarian for Visually Handicapped and Blind Library, and a peripatologist-consultant. Services of a psychometrist used in evaluative and diagnostic testing were purchased through one of the local agencies.

During the first year of operation, a referral system was developed to make diagnostic and evaluative services available to children and youth both in and out of school. Background information was gathered and submitted on a revised referral form. A revised screening procedure to process the many referrals submitted was begun in December, 1967. The project director along with the coordinators, social workers, and psychologists would meet each Friday morning to screen the referrals submitted that week. Some preliminary recommendations were made at this time, and the school or agency making the referral was notified of the action taken.

Supplementary classroom programs were provided in the following areas: learning disabilities at primary, middle grade, and junior high school levels; hearing handicapped at preschool and primary levels; severely orthopedically handicapped, secondary school age; emotionally disturbed, middle and upper elementary grade levels, junior high school level, and emotionally disturbed retarded youth ages 9 - 11; trainable mentally handicapped, secondary school level; and Negro underachiever, sixth and eighth grade levels. Qualified and specially-trained classroom teachers along with classroom aides in some classes were selected for placement in the supplementary classrooms. Instruction geared to the needs of the individual pupil was provided along with supportive services by members of the Center staff.

Supportive services by members of the Center staff were also provided in the following areas: counseling for parents of pupils referred to the Center; teachers other than those assigned to a supplementary classroom program; in-service growth programs; and consultative services in art, music, physical education, speech, and resource materials. Mobility and orientation for blind pupils and materials and aids for visually handicapped or blind pupils were additional supportive services provided. Other supportive services were purchased on a contractual basis for medical and psychological services for cases where parents were unable to pay all or a part of this type of service.

Evaluation of instructional methods and/or materials and equipment was a function of all personnel on the Center staff. The Center staff encouraged the regular classroom teachers, as well as supplementary classroom teachers, to experiment in the use of teaching techniques, instructional materials, or equipment. The effectiveness and appropriateness of techniques, materials, or equipment was a major goal in the project.

EVALUATION

The evaluation of the Special Education Diagnostic and Resource Center project incorporated the determining of the effect upon the following: (1) diagnostic and supportive services for appropriate placement and educational planning; (2) educational growth and personal adjustment of the clients of the Center; (3) ability of parents and youth to attain the goals of education; and (4) the development of innovative and/or exemplary methods and procedures.

Test and non-test types of data were utilized in the evaluation of project activities. Test data from the first year provided a base line from which test data from the current year could be compared. In some cases a different type of test or modification was used so that a new base line could be established. Non-test sources were used to get information about pupil growth and adjustment, reactions of persons involved in working directly or indirectly with the Center, and participation and utilization statistics. The following sources were employed in obtaining evidence of the effectiveness of programs within the project:

1. Evaluative and diagnostic services
    a. Records of referrals, staffings, pupils placed in supplementary classrooms, and contracted services
    b. Surveys of reactions of parents, school personnel, and representatives of participating agencies
    c. Interviews with diagnostic center staff
2. Supportive services
    a. Records pertaining to in-service training programs, materials and supplies, pupils receiving supportive services, and anecdotal information
    b. Surveys of reactions of parents, school personnel, Center staff, and representatives of participating agencies
    c. Samples of classwork kept by the consultants and evaluations of their own work
    d. Interviews with diagnostic center staff
3. Supplementary classroom programs
    a. Records of pupils placed in the classrooms and of pupils phased out
    b. Case histories of selected pupils
    c. Samples of classwork

   - d. Anecdotal information from classroom teacher
   - e. Activities rating scales
   - f. Selected standardized tests
   - g. Surveys of reactions of parents, school personnel, and representatives of participating agencies
   - h. Observational studies of pupils
   - i. Teaching techniques and use of materials with handicapped pupils

4. Development and evaluation of procedures, materials, and services
   - a. Records of requests for information, center visitors, and information disseminated
   - b. Surveys of reactions of teachers, principals, and agency representatives
   - c. Studies conducted by teachers and consultants

Limitations inherent in the evaluation of programs for pupils include: (1) small groups, limited control procedures, and atypical pupil characteristics; and (2) lack of appropriate measuring instruments and norms for handicapped children.

The evaluation of the evaluative and diagnostic services, supportive services, supplementary classroom programs, and experimental and evaluative services are presented in subsequent parts of this report. Presented in these sections will be objectives, methods and procedures, general results of data, interpretation of data, and comments about results. A summary including general comments and conclusions (if any) will be presented in the last section of the report. The appendices will include non-standardized data gathering devices, tabled information of pupil results, and experiments conducted by personnel involved in the project.

ADDITIONAL PROGRAMS

In addition to the nine classrooms provided during the first year of operation, four other classrooms were incorporated in the supplementary programs for the second year. One of these was the addition of a classroom of the same type (emotionally disturbed) but encompassed different grade levels in the elementary school. The second classroom added was one for emotionally disturbed mentally retarded ages 9 - 11. The third and fourth additions were for Negro underachievers with one room serving the sixth grade level and the other serving the eighth grade level.

No particular changes were made in objectives, criteria for selection, classroom procedures, etc. in the additional room for the emotionally disturbed. The purpose for establishment was to reduce the range of grade levels served by the previous room and to accomodate pupils on the waiting list. The second room for the emotionally disturbed was developed from a need to provide a special program for disturbed children whose I.Q.'s fall in the retarded range.

Two experimental classrooms were established to provide a program to discover and attempt to remedy the underlying causes of underachievement. Each pupil was scheduled in the experimental classroom for one hour per day in small groups of no more than four pupils at a time. The elementary class was arranged so that the child would not miss his regular reading or arithmetic periods. The junior high class was arranged so that the pupil would substitute the experimental class for his regular eighth grade social studies class (U. S. History). The maximum classroom enrollment of sixteen was established and maintained with provision for transferring pupils in and out of the program whenever it appeared to be in the best interest of the pupil of the program.

Additional services were incorporated with the diagnostic center by establishing a library for visually handicapped and blind students. One-half the funds used for salaries came from Title III sources, while the other half was supplied by the Kansas State Department of Education, Division of Special Education.

The library was established in one room at the Center to serve as a regional library for the entire state. Guidelines were established so that much of the service was performed in the Title III project area.

RELATED RESEARCH AND EVALUATION ACTIVITIES

Estimates have been made in various studies and surveys that in the average community there is approximately three percent of the student population with some form of mental retardation. An additional two percent of the student population could be included with other types of handicaps or multiple handicaps. These estimates indicate that a community must provide for about a five percent exceptionality among the school age population.

Studies that have been conducted in the areas of exceptionality have revealed that using small groups in structured situations has been the most effective method of working with the exceptional child. Very little evidence of specific techniques and teaching methods applicable to a public school setting is found in the literature to date. Perhaps one of the difficulties is the lack of uniformity of terminology and/or philosophy in dealing with the various types of problems included in programs for exceptional children. Another problem involves the appropriateness of standardized evaluative devices. Most tests are not normed to a specific type of exceptional child. Federally funded projects, including programs for the exceptional child, may spur further investigation into some needed areas.

PART 2

EVALUATIVE AND DIAGNOSTIC SERVICES

PURCHASED PSYCHOLOGICAL, MEDICAL, AND THERAPEUTIC SERVICES

Services that cannot be provided by the diagnostic center staff must be purchased through local agencies and practitioners. Professional services of physicians, dentists, and clinical psychologists were continued for some cases that had been referred the previous year. Many new cases were initiated during the past year which, when added to the continued cases, made the total case load out on a contractual basis nearly double the previous year. These services were the results of recommendations made by the sending school or referral agency and/or the evaluative committee from the diagnostic staff.

Records kept by the center regarding the number of referrals, where the referral was initiated, and the costs of these services are reflected in Table 2.1.

The services provided in some cases were for diagnosis and evaluation purposes. In other cases it was part of the recommended supportive service. The parents were encouraged to pay as much as they could, and use was made of funds from various insurance programs to help defray costs of contracted services. When possible funds for medical and therapeutic services were drawn from other federal programs, namely Medicaid and Champus, to pay part of the costs on contracted services. Total costs of services rendered are not reflected in Table 2.1 because it was not known how much parents were able to pay on their own. Costs tabulated are those taken from Title III funds.

TABLE 2.1

CONTRACTED SERVICES

NUMBER OF PUPILS REFERRED
AND
COSTS OF SERVICES

Referred by:	Medical	Psychological	Total
Agencies and Private Schools	9	14	23
Public Schools Outside Wichita	26	31	57
Parochial Schools	8	21	29
Wichita Public Schools	97	186	283
Totals	140	252	392
Continued from previous year	49	114	163
Grand Total	189	366	555
Cost from 7-1-67 to 6-30-68	$22,401.97*	$74,054.60**	$96,456.57

* Reported billings through B.C. - B.S. plus cost of drugs
**Includes consultation services and group therapy but does not include planning service charge and psychometrist salary and travel

Reactions to the services provided on a contractual basis were obtained by questionnaires sent to counselors in the area who had referred pupils to the center, parents of pupils in the supplementary classroom program or who had children who received purchased medical or psychological service, and teachers in the supplementary classrooms. A total of 127 parents were involved with pupils in supplementary classrooms. Twenty-seven were randomly selected out to obtain one hundred parents' names for the sample. Of pupils who received a medical or psychological referral, twenty-five names were randomly selected from each group to obtain the fifty parents in the second group. Numbers and percentage of returns from these groups are shown in Table 2.2.

The thirty-nine listed as parents of pupils in supplementary classrooms and the twenty as parents of pupils in regular classes are reported the way the parents marked and returned the questionnaires.

TABLE 2.2

NUMBER AND PERCENT OF QUESTIONNAIRES RETURNED

Group	Number Sent	Number Returned	Percent Returned
School Psychologists and Counselors	60	53	88%
Supplementary Classroom Teachers	12	10	83%
Parents			
of pupils in supplementary classrooms	100	39	39%
of pupils referred for medical or psychological services	50	20	40%
Totals	150	66*	44%**

* Seven questionnaires returned without designation of types of classroom pupil attends

**Total percent based on total return

Table 2.3 shows responses of the parents surveyed regarding contracted services in the medical and psychological areas. The N or number used as a base for computing percentages is the number of persons returning the questionnaire.

TABLE 2.3

RESPONSES OF PARENTS REGARDING PSYCHOLOGICAL AND MEDICAL SERVICES

Question:

How would you rate the following items regarding the Special Education Diagnostic and Resource Center?

9. Services of a clinical psychiatrist contracted by the Center.

Response	N = 66	% of Response
Very Helpful		27%
Helpful		15%
Of Little Help		2%
No Help		8%
Detrimental		3%
Left Item Blank		45%
		100%

10. Medical services contracted by the Center.

Response	N = 66	% of Response
Very Helpful		24%
Helpful		9%
Of Little Help		3%
No Help		6%
Detrimental		0%
Left Item Blank		58%
		100%

School counselors who had referred pupils to the diagnostic center during the past year were surveyed by questionnaire. They were asked if any pupils in the schools they served were given medical and/or psychological help through the center. Counselors were also asked to react as to whether or not they had observed any difference in school adjustment for those who had received such service. The results of these questions are shown in Table 2.4.

TABLE 2.4

NUMBER AND PERCENT OF RESPONSE OF SCHOOL PSYCHOLOGISTS AND COUNSELORS

Question		N	Percent
3a. Have any pupils in your school (schools) been assigned medical and/or psychological help through the Diagnostic Center?	Yes	48	91%
	No	2	4%
	Left Item Blank	3	5%
		53	100%
3b. If "Yes" on the above question, have you observed differences in school adjustment for those pupils?	Yes	33	62%
	No	8	15%
	Left Item Blank	12	23%
		53	100%

Forty-eight physicians, one dentist, and ten clinical psychologists were involved in serving the pupils in the medical and psychological areas. The services performed were nearly the same as the previous year. The notable exception was in the area of reacting to staffings of pupils referred to the center.

During the first year of operation, clinical psychologists were used as reactors in staffings to determine placement or other recommendations of pupils referred to the center on seventy-seven occasions. A change in the process of screening the referrals this past year resulted in the use of clinical psychologists as reactors only in extremely severe cases or in groups of cases at a single school.

Parents were asked if they felt that they had been involved as much as they would like in participating in formulating educational plans for their child. The result of this question is shown in Table 2.5.

TABLE 2.5

NUMBER AND PERCENT OF RESPONSE OF PARENTS

Question		N	Percent
2. Do you feel that you were allowed to participate as much as you should in the formulation of your child's educational plan?	Yes	49	74%
	No	8	12%
	Left Item Blank	9	14%
			100%

General comments and reactions from parents, teachers, and others seem to indicate that, if taken on an individual basis, many pupils did benefit from the contracted psychological and medical services provided by the center.

PSYCHOLOGICAL AND SOCIAL SERVICES PERFORMED BY CENTER PERSONNEL

One of the objectives of the diagnostic center project involved providing evaluative and diagnostic services for handicapped children and youth in the project area. Identification of these pupils could not be performed by the diagnostic center staff without the cooperation of school personnel, parents, participating school districts, and community agencies. One problem encountered during the first year of operation was that the referral system designed to gather information about handicapped children for the center resulted in having more pupils referred than the staff at the center could adequately handle.

The referral form was revised at the beginning of the second year of operation. More information was requested on the form which included a report from the building principal, the school counselor, the regular classroom teacher, the school nurse, and the speech clinician. Not all of the schools or agencies had the revised referral forms available and, therefore, referred pupils on the old forms. Some of the participating school districts outside of Wichita, as well as the private and parochial schools, do not have school counselors, nurses, and speech clinicians. It was of no advantage for them to use the new referral form.

During the first year of operation, 990 referrals were received by the center. Approximately three hundred of these cases were continued into the second year by receiving medical or psychological assistance, waiting special classroom placement, continuing in a supplementary classroom, or receiving assistance from the staff psychologists and/or social workers. Table 2.6 shows the number of pupils referred during the second year according to the type of school or agency making the referral.

TABLE 2.6

NUMBER OF REFERRALS PROCESSED AND EVALUATED
JULY 1, 1967 - JUNE 30, 1968

School or Agency	N
Wichita Public Schools	477
Public Schools Outside Wichita	122
Parochial Schools	63
Private Schools	53
Other Agencies	68
Courtesy Referrals*	10
	793

*Courtesy Referrals refer to the Diagnostic Staff performing some service for cases outside the project area.

A referral may be initiated by school personnel, parents, community agencies, and others. Approximately ninety-four percent of the referrals have been school initiated with the remaining cases referred by community agencies and/or parents. Once the information is gathered and the appropriate form is completed, it is sent to the diagnostic center. At this point a secretary records the pupil's name and other pertinent information for the master file of all cases referred to the center.

The next step in the process is accumulating all referrals for screening by the Diagnostic and Evaluative Admissions Committee, who meet each Friday morning. This committee is composed of the Project Director, Center Coordinator, the Coordinators for Physically and Psychologically Handicapped, the Staff School Psychologists, and the Staff

Social Workers. This committee discusses each referral and makes one of three decisions. The first alternative would be to send the referral back to the building principal with a request for further information or some recommendations for working with the child in the building he is presently attending. A statement to the effect that needed services are not available through the center is another possible reply to the building principal. The second choice would be to initiate a further study or classroom placement procedure. If further study is recommended, the case may then be referred to a clinical psychologist for evaluation, a physician for a medical checkup and report, a dentist for dental examination and care, a staff social worker for a complete social history, one of the staff curriculum consultants for evaluation, or a combination of one or more of these. When the reports and/or recommendations from these are completed, one of two things may occur. First, the recommendations may be forwarded directly to the referral school or agent through the building principal; or, secondly, a recommendation for a special classroom placement may be made. If the latter occurs, the Admissions Committee along with key personnel from both the sending and receiving schools meet as the Classroom Staffing Committee. This committee then discusses the case in depth and has one of two choices to make. If room is available in the appropriate special classroom, an immediate transfer of the pupil from the regular classroom to the special classroom would occur with placement and approval given by the project director. If room is not available at once, the pupil's name is placed on the appropriate waiting list for that class, and recommendations are made for working with the child in the regular classroom until special assignment is feasible. In either case a written communication of action taken by the committee is forwarded to the building principal of the referring school.

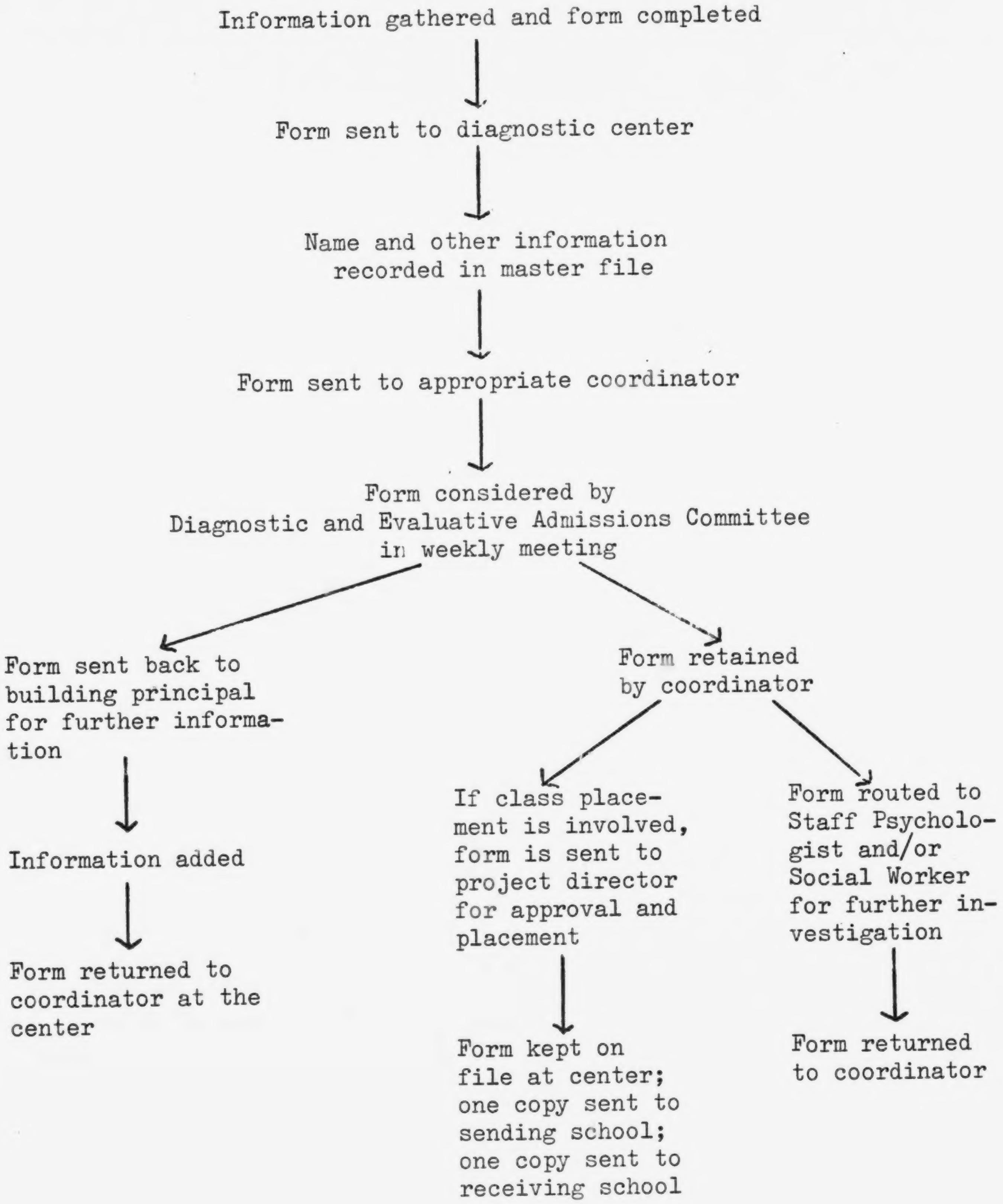
A second kind of staffing procedure may develop in one of two ways. A building principal may request staffings for several pupils at one time to be held with all members of his professional staff. This type of staffing involves the Admissions Committee and a clinical psychologist along with the building staff. The second way that a Reactor Staffing Committee may meet would result from the Admissions Committee identifying a need for screening several referrals from the same building. This committee has two alternatives. First, it may directly recommend procedure of working with the child in his present regular classroom setting. The second alternative would be to recommend special classroom placement which would warrant action from the Classroom Staffing Committee.

In any event, the procedure is geared to returning information or indications of action taken on the referral to the building principal, who, in turn, passes the information on to others in his building.

Figure 2.1 shows the route of the referral form once it is initiated by a parent, school personnel, or an agency representative. The total information gathered is not represented by items included on the referral form. The referral form was designed to provide basic data about a child so that recommendations could be made and problems could be identified.

FIGURE 2.1

ROUTE OF REFERRAL FORM


Information gathered and form completed
Form sent to diagnostic center
Name and other information recorded in master file
Form sent to appropriate coordinator
Form considered by Diagnostic and Evaluative Admissions Committee in weekly meeting
Form sent back to building principal for further information
Information added
Form returned to coordinator at the center
Form retained by coordinator
If class placement is involved, form is sent to project director for approval and placement
Form kept on file at center; one copy sent to sending school; one copy sent to receiving school
Form routed to Staff Psychologist and/or Social Worker for further investigation
Form returned to coordinator

The process of gathering information about the child and recording various test data, etc., is an important one. However, one might ask what happens to the pupil. It is quite obvious that all children referred to the center can not receive special classroom placement or each of the other services provided by the center. By far the largest percentage of pupils referred to the center remain in the regular classroom. During the first year of operation, seventy-four pupils received special classroom placement of the 990 pupils referred. In all, 398 pupils received service either in the form of class placement and/or medical or psychological contracted services. This represents approximately forty percent of the total number referred, with only 7.5 percent being assigned special classroom placement. Figure 2.2 shows important events that involve the pupil and indicates the various avenues a pupil may follow while remaining in his regular class or receiving special classroom placement.

FIGURE 2.2

EVENTS INVOLVING THE PUPIL

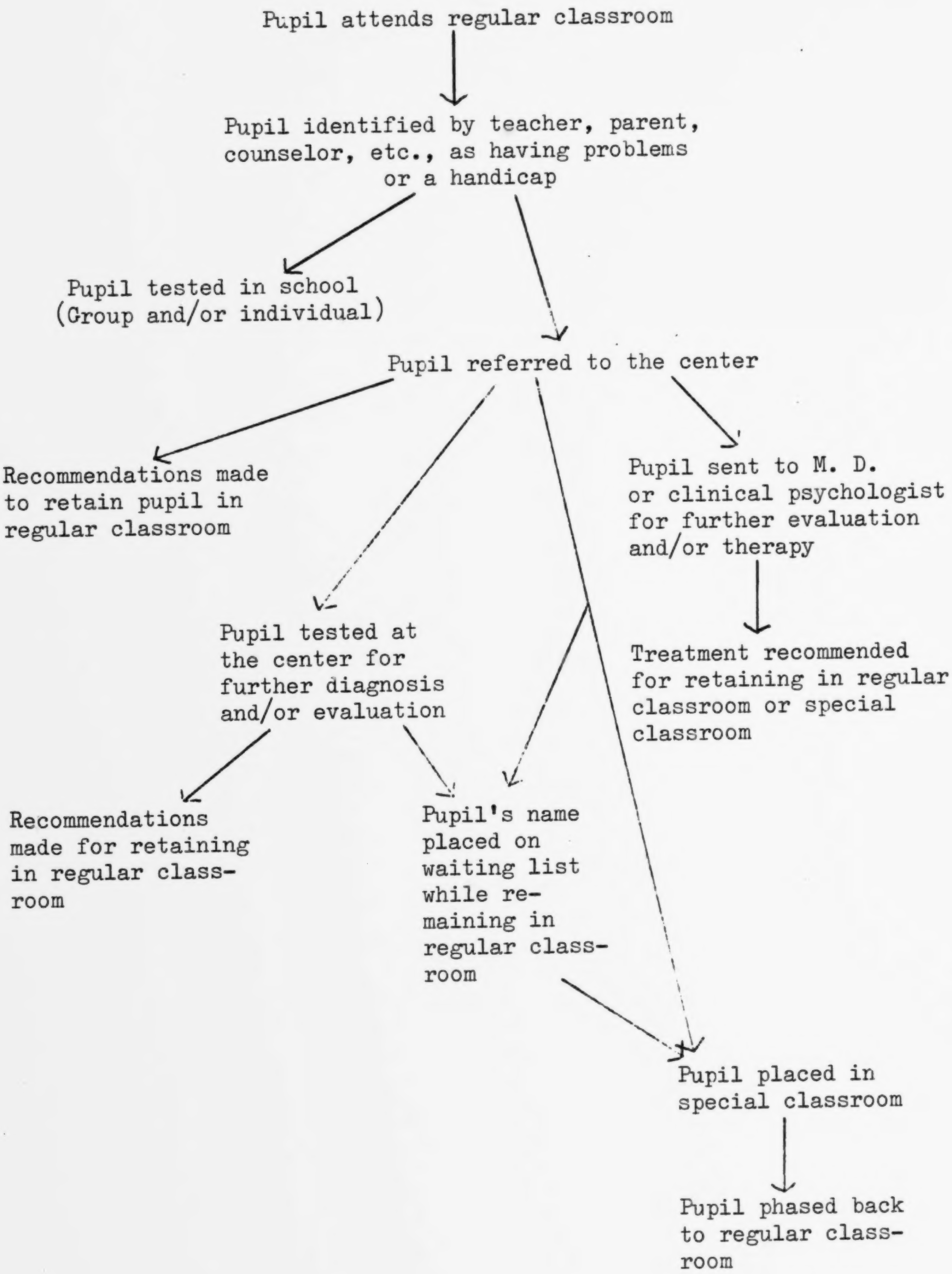

Pupil attends regular classroom
Pupil identified by teacher, parent, counselor, etc., as having problems or a handicap
Pupil tested in school (Group and/or individual)
Pupil referred to the center
Recommendations made to retain pupil in regular classroom
Pupil sent to M. D. or clinical psychologist for further evaluation and/or therapy
Treatment recommended for retaining in regular classroom or special classroom
Pupil tested at the center for further diagnosis and/or evaluation
Recommendations made for retaining in regular classroom
Pupil's name placed on waiting list while remaining in regular classroom
Pupil placed in special classroom
Pupil phased back to regular classroom

TABLE 2.7

INFORMATION CONTAINED IN PUPIL'S FOLDER

Kind of Information	Source	How or Where Reported	Use	Communicated To	Means of Communication
Name, age, sex, grade, school, address, race, place and date of birth, parents' names and occupation, siblings, description of the problem, attendance record, and reports of disciplinary action, if any	Building Principal	First page of referral form	Screening cases for diagnosis and evaluation	Diagnostic Center	Referral form
Description of the problem, group test data, individual test data, observations, specific recommendations	School Counselor	Second page of referral form	Screening cases for diagnosis and evaluation	Diagnostic Center	Referral form
Description of the problem, seriousness of the problem, methods used to alleviate or remediate, general information about pupil's achievement, grades earned by pupil, and ratings of social behavior	Regular Classroom Teacher	Third page of referral form	Screening cases for diagnosis and evaluation	Diagnostic Center	Referral form
Physicians name, results, if any, of preliminary eye and ear examinations; report, if any, of physical disorder, and special medications	School Nurse	Fourth page of referral form	Screening cases for diagnosis and evaluation	Diagnostic Center	Referral form
Evaluation of speech or hearing disorder, if any	Speech Clinician	Fourth page of referral form	Screening cases for diagnosis and evaluation	Diagnostic Center	Referral form

Report of extended evaluation including: further individual test results and interpretation, observation, and recommendation	Clinical Psychologist (contracted)	Written Report	Help determine action to be taken on the case by Evaluative and Admissions Committee	Coordinator in charge of the case	Written report and/or phone report
Report of extended evaluation including: description of physical disorders, diseases, medication used and/or prescribed, general physical conditions, physical limitations, results of audiograms, e.e.g., etc., and recommendations	Medical Doctor (contracted)	Written Report	Help determine action to be taken on the case by Evaluative and Admissions Committee	Coordinator in charge of the case or Social Worker assigned to the case	Written report and/or phone report
Report of extended evaluation including: dental condition (cavities, fillings, teeth missing), dental care needed, and recommendations	Dentist (contracted)	Written Report	Help determine action to be taken on the case by Evaluative and Admissions Committee	Coordinator in charge of the case or Social Worker assigned to the case	Written report and/or phone report
Report of extended evaluation including: further individual test results and interpretation, observations, and recommendations	Staff School Psychologist	Written Report	Help determine action to be taken on the case by Evaluative and Admissions Committee	Coordinator in charge of the case	Written report and/or oral report to committee
Social History including: family background, social relationships among siblings, problems as perceived by family, etc.	Staff Social Worker	Written Report	Help determine action to be taken on the case by Evaluative and Admissions Committee	Coordinator in charge of the case	Written report and/or oral report to committee

In order to consider as many aspects of a case as possible, a folder is kept at the center containing all written communication regarding the referred pupil. One method of disseminating the information about the child is to hold a staffing in which the members of the diagnostic team discuss various approaches that seem reasonable in order to formulate the best possible educational plan for that particular child. As indicated earlier, staffings occur when special classroom placement is considered or when a number of cases occur in the same school. In addition to the information obtained on the referral form, other reports, test results and interpretation, social histories, etc., are gather in a folder and retained by the appropriate coordinator for discussion at the staffing for the pupil. In some cases a clinical psychologist is included in the staffing as well as reacting to presentations when groups of cases are discussed. As Table 2.7 indicates, the various types of information, who provides it, how it is reported, the use made of the information, and how and where the information is communicated are illustrated.

For each pupil placed in a supplementary classroom, a staffing is held at the outset, before placement, again at the end of the first semester, and again at the end of the year. Decisions are made at a particular staffing session to continue working with the child in the special placement situation, to phase back to the regular classroom, or to formulate a particular educational plan to meet the needs of that particular individual. As shown in Table 2.8, pupils were evaluated and reevaluated periodically in order to determine progress being made and/or to determine further recommendations necessary to continue working with the child.

TABLE 2.8

STAFFING AND RESTAFFING

The number of pupils staffed into Title III classrooms	131
The number of pupils restaffed at the end of First Semester	83
The number of pupils restaffed at the end of the school year	100
The number of pupils the staffing committee recommended to remain in Title III classrooms for the 1968-69 school year	54
The number of pupils the staffing committee recommended to be enrolled back into regular classrooms	28
The number of pupils the staffing committee recommended for other special placement	13
The number of pupils the staffing committee deferred recommendation until start of 1968-69 school year	4
The number of pupils moved out of district	1

Personal interviews were conducted with four of the ten clinical psychologists. The four were selected on the basis of frequency of contact with the center by the coordinator. In assessing the effectiveness of the procedure of holding a staffing for severe cases, the interviewer asked each of the psychologists contacted their reactions to the use of this procedure by center personnel. The question and responses by categories are shown in Table 2.9.

TABLE 2.9

CATEGORIES OF RESPONSES FROM CLINICAL PSYCHOLOGISTS

Question: In viewing the staffing procedure used by the Diagnostic Center, in your opinion, how effective is this procedure in the following areas: (a) involving school personnel, (b) utilizing available information and data, and (c) making recommendations to the receiving school?

1.	Appears to be effective	4
2.	Cases selected seem to be appropriate	2
3.	Information disseminated useful to involved school personnel	2
4.	School personnel should include more information in staffing	2
5.	Information obtained by school personnel appears to be pertinent	2
6.	Recommendations made to school personnel should be more detailed	2

Three of the four clinical psychologists interviewed had been reactors at staffings held for one or more pupils. They were asked to rate on a five point scale from very poor to very good items involving classroom placement, recommendations made, and supportive services recommended. Table 2.10 gives these responses.

TABLE 2.10

REACTOR STAFFING RESPONSES FROM CLINICAL PSYCHOLOGISTS REGARDING ITEMS ON STAFFING

Item	N = 3	Rating				
		Very Poor	Poor	Fair	Good	Very Good
1.	Special classroom placement (if involved)				3	
2.	Recommendations by sending school personnel (if any)			1	2	
3.	Supportive services recommended (if any)				2	

From the above questions and other general comments and reactions, it appears that the psychologists interviewed feel that the staffing procedure used by the diagnostic center is adequate for the purpose for which it is being used. All of them would agree that a common problem in any method of interchange of information is communication.

Reactions to the referral process were obtained from questionnaire items and were asked of school counselors, school nurses, and speech clinicians. Numbers and percentages of returned questionnaires are shown in Table 2.11.

TABLE 2.11

NUMBER AND PERCENT OF QUESTIONNAIRES RETURNED

Group	Number Sent	Number Returned	Percent Returned
School Psychologists and Counselors*	60	53	88%
School Nurses	50	27	54%
Speech Clinicians	22	10	45%

*This information is also in Table 2.2.

The sample of sixty school psychologists and school counselors was based on forty-eight in the Wichita Public Schools who had referred children to the center and twelve in the project area who had been involved in the project in some way during the year. The school nurse sample of fifty came from all forty-one school nurses in the Wichita Public Schools and nine from the project area. The speech clinician sample included all elementary and secondary level speech clinicians in the Wichita Public Schools. Results of their reactions are shown in Table 2.12.

TABLE 2.12

RESPONSES OF SCHOOL COUNSELORS, SCHOOL NURSES, AND SPEECH CLINICIANS REGARDING REFERRALS

Item	Group Responding	N	Percentage Giving Each Response		
			Yes	No	Left Item Blank
1. a. Referrals handled promptly enough	Counselors	53	64%	32%	4%
	Nurses	27	41%	7%	52%
	Speech Clinicians	10	50%	20%	30%
b. Referral form more difficult to get completed than old form	Counselors	53	26%	70%	4%
c. "Feedback" information back in a reasonable amount of time	Counselors	53	68%	23%	9%
	Nurses	27	33%	11%	56%
	Speech Clinicians	10	30%	40%	30%
d. No response to some referrals	Counselors	53	38%	57%	5%
	Nurses	27	11%	15%	74%
	Speech Clinicians	10	20%	50%	30%
e. Received verbal report only	Counselors	53	25%	62%	13%
	Nurses	27	11%	26%	63%
	Speech Clinician	10	40%	30%	30%
f. Recommendations made were clearly stated	Counselors	53	72%	19%	9%
	Nurses	27	33%	4%	63%
	Speech Clinicians	10	30%	30%	40%
g. Reports received by the school appeared to be complete	Counselors	53	64%	21%	15%
	Nurses	27	30%	7%	63%
	Speech Clinicians	10	30%	30%	40%
h. Information returned appeared to be useful	Nurses	27	37%	4%	59%
	Speech Clinicians	10	20%	30%	50%

On the basis of the high rate of items left blank among those nurses and speech clinicians returning the questionnaires and general comments and reactions by both groups, one must say that the counselor has a larger portion of the responsibility in handling referrals in the school setting. Remarks by nurses and speech clinicians to the effect that the counselor or school psychologist handles the referrals seem to corroborate the higher percentage of items left blank on the part of the nurses and speech clinicians.

The re-staffing of each pupil at mid-year was initiated by the center personnel this year. This was attempted in order to take a further look at the progress and development of each child and to disseminate this information to the key personnel who work with the child. Among those attending the re-staffing were the appropriate coordinator, the curriculum consultants in art, music, and physical education, the staff school psychologists, the staff social workers, the supplementary classroom teacher, the building principal, and the sending school principal and counselor. The reactions of those supplementary teachers returning the questionnaire are given in Table 2.13.

TABLE 2.13

RESPONSE OF SUPPLEMENTARY CLASSROOM TEACHERS

How do you rate the following services provided by the Special Education Diagnostic and Resource Center? If you did not receive a service, write "none" in the blank preceding the rating boxes.

1. i. Re-staffing information at mid-year.

Response	N = 10	Percent of Response
Very Helpful		20%
Helpful		50%
Of Little Help		20%
No Help		0%
Detrimental		0%
Left Item Blank		10%

As seen in the Table above, most of the supplementary teachers felt the information from the re-staffing was helpful to them. The one non-response came from a classroom that did not hold staffings at mid-year.

An important service performed by center personnel includes the testing of children for diagnostic purposes. In addition, testing is performed for evaluative purposes. The staff school psychologists and the psychometrist, provided through contracted services, perform the task of testing for both of the above purposes. The basic tests for evaluative purposes include: The Wide Range Achievement Test (WRAT); The Goodenough - Harris Drawing Test; The Peabody Picture Vocabulary Test (PPVT); and the Hiskey Test. These are used on a pretest, post-test basis in the supplementary classrooms in an attempt to assess the growth or progress made by the pupils either individually or as a group. Not all the above tests are used in all supplementary classrooms. The Hiskey is used only in the pre-school and primary hearing handicapped classrooms, and none of the other tests are administered. The WRAT, Goodenough - Harris, and the PPVT are all given in all the other supplementary classrooms with the following exceptions: The Goodenough - Harris was not given in the elementary Negro-underachiever classroom and the secondary level trainable mentally handicapped classroom; and it was given to only those who could perform the drawing tasks in the secondary level orthopedically handicapped classroom.

Diagnostic testing and interpretation becomes an integral part of the information about the child referred to the center. Among the key testing devices used by the center personnel are the Wechsler Intelligence Scale for Children (WISC), Wechsler Adult Intelligence Scale (WAIS), Wechsler Pre-School and Primary Scale of Intelligence (WPPSI), Bender Visual Motor Gestalt Test, Binet L -M, Slosson Intelligence Test, Illinois Test of Psycholinguistic Abilities (ITPA), and the Frostig Test of Visual Perception. A complete listing of tests available for use by the staff school psychologists can be found in Table 1 in Appendix B.

The staff social workers act as a liason between the home, school, child, and community agencies. Much of their time is consumed in working with the parents in regard to the best educational plans for their child. This involves gathering information for preparation of the social history concerning the child referred to the center and interpreting the project to the parents.

The social workers provide written social histories and background information on many students referred. The focus during the year was providing social histories on pupils placed in the supplementary classroom program. Approximately ninety percent of the pupils placed in supplementary classrooms had social histories provided. The purpose of the focus on these pupils was to provide as complete a set of information about the pupils for the re-staffing procedure described earlier. In addition to providing the social histories and being a member of the staffing and re-staffing teams, the social worker coordinates the communication between the home and physicians, clinical psychologists, welfare agencies, and other community agencies.

To assess the impact of the service provided by the social workers, reactions were received from parents, supplementary classroom teachers, and principals. In addition, a personal interview was conducted with both social workers to get their views of how well they felt they have fulfilled the responsibilities of their position and favorable outcomes, as they see it, resulting from this type of a project. Results of these reactions are summarized in the following tables.

TABLE 2.14

NUMBER AND PERCENT OF QUESTIONNAIRES RETURNED

Group	Number Sent	Number Returned	Percent Returned
Supplementary classroom teacher*	12	10	83%
Parents			
of pupils in supplementary classroom*	100	39	39%
of pupils referred for medical or psychological services	50	20	40%
Principals	100	83	83%

*This information also contained in Table 2.2

TABLE 2.15

RESPONSES OF SUPPLEMENTARY CLASSROOM TEACHERS

How would you rate the following services provided by the Special Education Diagnostic and Resource Center? If you did not receive a service, write "none" in the blank preceding the rating boxes.

1. e. Case history information

Response	N = 10	Percent of Response
Very Helpful		20%
Helpful		70%
Of Little Help		0%
No Help		0%
Detrimental		0%
Left Item Blank		10%

f. Social-life backgrounds

Response	Percent of Response
Very Helpful	10%
Helpful	60%
Of Little Help	0%
No Help	0%
Detrimental	0%
Left Item Blank	30%

TABLE 2.16

RESPONSES OF PARENTS

How would you rate the following items regarding the Special Education Diagnostic and Resource Center?

4. Interviews with the Center social worker

N = 66

Response	Percent of Response
Very Helpful	32%
Helpful	29%
Of Little Help	8%
No Help	4%
Detrimental	0%
Left Item Blank	29%

5. Information about available programs for your child

Response	
Very Helpful	30%
Helpful	30%
Of Little Help	8%
No Help	3%
Detrimental	0%
Left Item Blank	29%

TABLE 2.17

RESPONSES OF PRINCIPALS

How would you rate the following services provided by the Diagnostic Center in terms of meeting special needs of handicapped children in your school?

1. d. Parental involvement in formulating an educational plan for their handicapped child

Response	Percent of Response
Very Helpful	6%
Helpful	41%
Of Little Help	16%
No Help	2%
Detrimental	1%
Left Item Blank	34%

1. e. Services provided for your teachers by the consultants or social workers

Response	
Very Helpful	13%
Helpful	48%
Of Little Help	10%
No Help	7%
Detrimental	0%
Left Item Blank	22%

Of the respondents in the various groups, more than half of these viewed the services or work of the staff social workers as either helpful or very helpful in all ratings except parental involvement in educational plans, as seen by the responding principals. The highest percentage of responses in the helpful to very helpful categories came from the supplementary classroom teacher respondents regarding case history information. Only forty-seven percent of the principals who returned questionnaires rated parental involvement helpful or very helpful. One must also notice that on that item in the principal's questionnaire about one-third of those returning the questionnaires left that item blank.

Social workers were asked to respond to the following interview question: "From the list of specific responsibilities for your position, which do you feel have been filled to the greatest extent? Which to the least extent?" Both social workers agreed on the following items. Responsibilities filled to the greatest extent were providing social histories for pupils in the supplementary classroom program, interpreting the project to parents, and serving as a liaison person between the center, the school, the child, the family, and the community agencies. Responsibilities filled to the least extent included assisting in conducting in-service training meetings. The feeling of the social worker regarding the provision of social histories might also be reflected in the high percentage of responses of the supplementary classroom teacher regarding the helpfulness of case history information.

PART 3

SUPPORTIVE SERVICES AND ADDITIONAL SERVICES

Supportive services were envisioned to help the handicapped pupil enter, remain in or reenter regular or specialized educational and training programs.

OBJECTIVES

1. To provide consultation concerning pupil needs and available programs.
2. To provide individual and group counseling
3. To provide educational and informative programs for parents, teachers, and administrators.
4. To provide consultation in curriculum areas of art, music, and physical education and instructional materials and equipment.
5. To provide assistance in mobility and orientation training for the visually handicapped pupil.

COUNSELING SERVICES PROVIDED BY THE CENTER STAFF

Counseling services provided by the center staff involved consultations with parents of referred children by phone or personal interview, individual or group counseling with pupils planned in cooperation with the school psychologist, counselor, and teacher in the school where the pupils were attending, and interpretation of available services and programs concerning the needs of children to anyone in the project area.

Performance of these services fell to each member of the diagnostic center staff. Parents were encouraged to come to the center whenever possible for discussion of their child's problem. Group counseling was provided through programs for parents utilizing various members of the staff.

Group counseling and therapy was provided as the result of the center staff working with the counselor and other personnel in one junior high school in a disadvantaged area. Group therapy services were purchased from a clinical psychologist who worked closely with two counselors and three teachers in the junior high.

The group included five educable mentally handicapped boys who were selected for this experiment because they were exhibiting bizarre behavior. Three teachers of the educable, and the two school counselors were included on an alternating basis when the group met once each week. Of the five boys originally selected for the group, one moved to another school area within the city and was dropped from the group therapy sessions. The remaining four boys had an average I.Q. as measured by the

Wechsler Intelligence Scale for Children (WISC) of 67. Fifteen group sessions, one hour in length each, were held with the boys and one of the teachers and one counselor attending each session. Group activities involving cooperative behavior were utilized with behavior modification techniques using rewards for acceptable behavior.

The clinical psychologist, one of the counselors, and one of the teachers were interviewed to get reactions regarding the success or failure of this endeavor. The psychologist stated that noticeable change was observable after the sixth or seventh session. The counselor felt that improvement was observed by him, but one or two cases did not show the improvement until later. The teacher interviewed felt that the group approach was excellent but would be more effective at the building level rather than taking the pupils outside the school building for the sessions.

The clinical psychologist summed up the work with the group in the following words, "The primary advantage of this procedure was having the counselors and teachers involved in a cooperative effort which presented a more consistant field of stimuli for modifying the behavior of those in the group. The long range goal would be to have other groups formed at the school where any and all of the teachers could be involved and techniques used in small group sessions could be tried and/or modified for use in the regular class."

A general reaction to the counseling services provided by members of the center staff were obtained by the questionnaire to the parents. These results are summarized in Table 3.1.

TABLE 3.1

RESPONSES OF PARENTS REGARDING COUNSELING SERVICES

How would you rate the following items regarding the Special Education Diagnostic and Resource Center?

6. Counseling related to your child's special needs

Response	N = 66	Percent of Responses
Very Helpful		42%
Helpful		30%
Of Little Help		6%
No Help		4%
Detrimental		0%
Left Item Blank		17%

As shown by Table 3.1, over seventy percent of the parent respondents rated the counseling services provided by the center as helpful to very helpful.

CONSULTATIVE SERVICES PROVIDED FOR THE SUPPLEMENTARY AND REGULAR CLASSROOMS

Curriculum consultants in art, music, and physical education were responsible for providing service to the supplementary classroom program, pupils in regular classrooms in the project area and, assisting in the presentation of in-service training programs throughout the year. In addition they also served on the classroom staffing committee and reported pupil progress and other information at the mid-year and end of the year staffings of pupils in the supplementary classroom program.

During the first semester each consultant except the resource consultant had a scheduled weekly visit in each of the supplementary classrooms. The schedule was changed for the second semester to bimonthly visits. During the visits the consultants helped the teachers with demonstrations, provided supplies and lesson plans for special activities in the classroom, and when possible, endeavored to work experimentally with materials, equipment and procedures geared to meeting the needs of handicapped children. Results of the experimental efforts of the consultants will be presented in a later section of this report. Results of the reaction to various aspects of the curriculum consultants work by the supplementary classroom teachers are given in Table 3.2.

In addition to the regular visits to the supplementary classrooms and participating on staffing committees, the curriculum consultants participated in six in-service training programs each for teachers and administrators of all grade levels. Individual consultation for teachers and/or students were filled on request. Approximately thirty such were filled by the consultants during the year of which about one-fourth were requests from county and/or parochial schools.

It would be a difficult task to try to measure the effect the consultants had directly with the pupils involved because much of the work was done indirectly with the teacher and/or the administrator outside of the Title III supplementary classroom program. Much of the results of tasks performed by the curriculum consultants will be presented in a later portion of this report dealing with the supplementary classrooms.

TABLE 3.2

RESPONSES OF SUPPLEMENTARY CLASSROOM TEACHERS REGARDING SERVICES OF THE ART CONSULTANT

How would you rate the following services provided by the Special Education Diagnostic and Resource Center?

N = 10

	PERCENT OF RESPONSE					
2. Services provided by the Art Consultant in the following areas:	Very Helpful	Helpful	Of Little Help	No Help	Detri-mental	Left Item Blank
a. Appropriateness of project ideas (N = 9)	22%	44%*	22%	0	0*	11%
b. Providing lesson plans instructions, and motivation for the teacher	30%	40%	20%	0	0	10%
c. Providing motivation for the student	20%	30%	40%	0	0	10%
d. Supplying materials	60%	30%	0	10%	0	0
e. Time spent in** classroom (N = 9)	33%	33%*	22%	0	0*	11%

*One respondent double marked and indicated both choices "at times."

**One respondent rated service as Helpful but was not as much as desired.

TABLE 3.2 (continued)

RESPONSES OF SUPPLEMENTARY CLASSROOM TEACHERS
REGARDING SERVICES OF THE MUSIC CONSULTANT

How would you rate the following services provided by the Special Education Diagnostic and Resource Center?

N = 10

	PERCENT OF RESPONSE					
3. Services provided by the Music Consultant in the following areas:	Very Helpful	Helpful	Of Little Help	No Help	Detrimental	Left Item Blank
a. Appropriateness of materials	60%	40%	0	0	0	0
b. Use of musical instruments	60%	30%	10%	0	0	0
c. Provision of lesson ideas and materials	40%	50%	10%	0	0	0
d. Providing motivation for the students	40%	40%	10%	0	0	0
e. Time spent in classroom	50%	40%	10%	0	0	0

TABLE 3.2 (continued)

RESPONSES OF SUPPLEMENTARY CLASSROOM TEACHERS REGARDING SERVICES OF THE PHYSICAL EDUCATION CONSULTANT

How would you rate the following services provided by the Special Education Diagnostic and Resource Center

N = 10

	PERCENT OF RESPONSE					
	Very Helpful	Helpful	Of Little Help	No Help	Detrimental	Left Item Blank
4. Services provided by the Physical Education Consultant in the following areas:						
a. Appropriateness of games and exercises	40%	50%	10%	0	0	0
b. Use of tests in the program	30%	60%	0	0	0	10%
c. Provision of lesson plans and equipment	30%	60%	10%	0	0	0
d. Providing motivation for the students	30%	60%	0	10%	0	0
e. Time spent in classroom	40%	40%	10%	0	0	10%

From the items in Table 3.2, one can observe that sixty to one hundred percent of the supplementary classroom teacher respondents rated the various services provided by the curriculum consultants as being helpful or very helpful. Four of the listed services among the three consultants were rated as no help or detrimental.

PROVISION OF MATERIALS AND EQUIPMENT

The materials and resource library at the center housed professional books, expendable materials, sets of books for pupils' use, various types of educational materials kits, and audio-visual equipment. These materials and/or equipment were the type which are not usually a part of the ordinary materials or equipment ordered for the classroom. A resource consultant was responsible for the following kinds of tasks: evaluating, selecting, and ordering all materials for the resource room; advising all personnel concerned with Title III what aids are available and how to most adequately employ them; organizing and directing a system of making materials and equipment accessible to children, teachers, parents, and administrators; and assisting in conducting in-service training for school personnel.

Periodically during the year a newsletter was sent to all the schools in the project areas entitled "ABC's From the Resource Center." This device was used to inform schools of the available curriculum aids, kits, materials, and publications available for loan to anyone feeling the need for additional materials.

Twenty-five different kinds of electrically operated devices were available for loan on a long or short term basis. These included such things as overhead projectors, DuKane filmstrip and sound projectors, and the Hoffman Reader. Various types of media kits were also available. These included the Peabody Language Kits, Hoffman Reader program kits, various magnetic tape recorder kits, map and chart symbol kits, science equipment kits, structural mathematics kits, reading readiness kits, perceptual skills kits, S. R. A. kits, transparency kits, and reading tape kits.

During May a publication was distributed listing all the professional books, periodicals, and bulletins available at the resource center. This publication was sent to each Wichita school that had a special education classroom, most of the parochial schools, and all of the public schools in the project area outside of the Wichita district. This booklet listed 490 professional books, 134 periodicals, and thirty-four current bulletins.

Records kept in the resource center show that 426 professional books had been checked out to individuals during the year. Thirty-five books were made available for a special education institute, and twenty-two were checked out to other members of the diagnostic staff. The twenty-two checked out to others on the staff does not include books and other publications ordered by them through the resource center.

Seventy-five pieces of audio-visual equipment were checked out through the center during the year. The one type most frequently requested was the Language Master. The Language Master was checked out on thirty-nine occasions. Other types frequently used were overhead projectors and filmstrip-record players.

One of the responsibilities of the resource consultant was to evaluate, select, and order materials for the resource room. In order to retrieve the information needed to aid in evaluating the effectiveness and usefulness of equipment and materials, the consultant asked each supplementary classroom teacher to complete a form giving the what, why, who, how, and kinds of effects or results with various materials and equipment. Table 3.3 is a sample of the kinds of materials and/or equipment used by the individual supplementary classrooms. This is not a specifically chosen sample, The consultant aided in the selection in an effort to be representative of some of the kinds of usage made of various materials and equipment.

TABLE 3.3

SAMPLES OF REPORTS ON MATERIALS AND EQUIPMENT

Nature and Level of Materials	Why Used	Who Used	How Used	Results
Learning Disabilities #1				
1. Picture Book Parade #2 (Primer-1st)	Aid visual recall	All pupils	Filmstrips viewed and stories read by class	Two pupils able to recall when asked to read
2. Flannel board number cut-outs (beginning numbers)	To recognize sets	One pupil	Manipulative independent activity	Able to recognize sets
Learning Disabilities #2				
1. "Phonies in a Nutshell" Filmstrip and record (Grades 3 and 4)	Auditory and visual phonic training	Six pupils	Individually or in pairs	Improved word attack and spelling by sound
2. "People Around Us" American Guidance Service (Upper Level #2)	Group discussions and self-guidance	All pupils	Oral reading and discussion	50% of class able to discuss freely
Learning Disabilities Junior High Level				
1. Language Master (2nd grade material)	Spelling, speech, and multiplication	Three pupils	Oral spelling and speech improvement	Very small gains
2. Merrill Linguistic Readers (Grades 1 - 4)	Improve reading skills	All pupils	Individually at appropriate level	Small gains in reading skills
Hearing Handicapped Pre-School				
1. Kitchen ware (3 to 5 years)	Familiar to background experience	All pupils	Language development. Name object and related activity	Motivated attendance. Makes pupils more expressive

TABLE 3.3
(continued)

Nature and Level of Materials	Why Used	Who Used	How Used	Results
2. Sounds and Patterns of language (Background with magnetic figures Grade 1)	Language stimuli	All pupils	Pupils directed placement of figures	High interest; spontaneous speech
Orthopedically Handicapped Secondary Level				
1. Sullivan Reading Series (I, II, and III)	Reading comprehension	All pupils	Oral and silent reading for pleasure and work with spelling and English	All read better orally; raised average score on workbook materials from 78 to 89 in 3 months
2. Science models of eye, ears, and visual man (Grades 6 - 9)	Science lessons	All pupils	Observation and workbooks of teacher's selection	Able to name body parts
Trainable Mentally Handicapped Secondary Level				
1. Teletrainer (Loaned by S. W. Bell with phone hook-up within room)	Train for usage of phone	All pupils	Practice dialing emergency numbers and classmates' numbers	Able to dial numbers properly and carry on conversations
2. Teacher made charts for coins (pennies, dimes, nickels, and quarters)	Learn value of coins	All pupils	Coins placed on charts for appropriate values	Learned to count various amounts of money

TABLE 3.3
(continued)

Nature and Level of Materials	Why Used	Who Used	How Used	Results
Emotionally Disturbed #2				
1. Language Master (individual appropriate level	Repetitive oral and visual drill	All pupils	Word recognition by individuals	Able to increase vocabulary
2. Tape recorder (individual appropriate level)	Mathematics skill development	All pupils	Recorded combinations and tables then played back for corrections	Able to decrease errors in basic combinations
Emotionally Disturbed #3				
1. Basic Texts in Reading, Math, English, Science, and Social Studies (Grades 3 - 6)	Prepare pupil for re-entry in regular classroom	All pupils when appropriate	Comprehensive checklist to determine level then assignments made for each pupil	Pupil becomes aware of regular classroom activities
2. Universal Practice Worksheets for Math (Grades 2 - 4)	Practice in math skills	All pupils	Programmed sequence for individual needs, one sheet at a time	Effective if returned with explanation immediately
Emotionally Disturbed E.M.H.				
1. Color Factor structural math (Cuisinaire Bar, Grade 1)	To develop number concepts	One pupil	Manipulation of concrete items	Increased scores on achievement test
2. "Mixie, the Pixie" (Book IA and IIA)	Creative fantasy	All pupils	Transparencies used on overhead projector, pupil writes or tells story	Interest high

TABLE 3.3
(continued)

Nature and Level of Materials	Why Used	Who Used	How Used	Results
Emotionally Disturbed Junior High Level				
1. Micro-Viewer (Grade 7)	Science skills and facts	Four pupils	Individual activity followed by student initiated research	Some gains in skills, high interest in library research
2. Movie Projector (Junior High)	Teach pupils to operate projector; Help pupils relax	All pupils	Individually to learn operation; Group to view movies with another class	Aided socialization; all pupils learned to operate projector properly; produced "calming" effect on pupils
Negro Underachiever Elementary Level				
1. Hoffman Reader (Grades 4 - 6)	Develop study skills	Two pupils	Independent choice of materials	Improved workbook accuracy
2. Programmed Geography (Grades 3 - 6)	Geographical spacial relation	All pupils	Individual independent activity	Learned facts; gained confidence in working independently

In addition to materials checked out to Title III supplementary classrooms, records at the center show that forty-three other schools in the project area checked out 329 items or sets of items as well as twenty-five items that were checked out to parents.

A complete listing of materials and equipment checked out to the

②

supplementary classrooms is found in Appendix B.

The supplementary classroom teachers were asked to rate the services provided by the resource consultant. Results of their ratings are given in Table 3.4. This shows that eighty or ninety percent of the respondents in this group rated the selected services provided by the resource consultant as helpful or very helpful.

TABLE 3.4

RESPONSES OF SUPPLEMENTARY CLASSROOM TEACHERS
REGARDING SERVICES OF THE RESOURCE CONSULTANT

How would you rate the following services provided by the Special Education Diagnostic and Resource Center?

N = 10 PERCENT OF RESPONSE

5. Services provided by the Resource Consultant in the following areas:	Very Helpful	Helpful	Of Little Help	No Help	Detrimental	Left Item Blank
a. Suggestions of appropriate materials	40%	50%	0	10%	0	0
b. Explanation and/or demonstration of equipment or materials	40%	40%	10%	0	0	10%
c. Supplying materials and/or equipment	50%	40%	10%	0	0	0
d. Time spent explaining services and/or equipment or materials	40%	40%	10%	0	0	10%

Reaction to services of the resource center and the consultants were also obtained by questions asked of principals and non-Title III teachers. Non-Title III teachers are those who are not contracted to teach in one of the supplementary classrooms. Table 3.5 gives the number and percent of questionnaires returned from these groups.

TABLE 3.5

NUMBER AND PERCENT OF QUESTIONNAIRES RETURNED

Group	Number Sent	Number Returned	Percent Returned
Principals*	100	83	83%
Non-Title III Teachers	50	27	54%

*This information also contained in Table 2.14

The sample of fifty non-Title III teachers was a random selection of forty elementary teachers and ten secondary level teachers from the lists of names of those attending one or more in-service training session. Table 3.6 gives responses of the non-Title III teachers.

TABLE 3.6

RESPONSES OF NON-TITLE III TEACHERS REGARDING SERVICES OF THE CONSULTANTS

How do you rate the following services provided by the Special Education Diagnostic and Resource Center?

1. c. Services provided by the consultants (art, music, physical education, and resource)

Response	N = 27	Percent of Response
Very Helpful		22%
Helpful		15%
Of Little Help		7%
No Help		0
Detrimental		0
Left Item Blank		56%

d\. Materials and/or equipment available from the Resource Center.

Response	
Very Helpful	26%
Helpful	26%
Of Little Help	4%
No Help	0
Detrimental	0
Left Item Blank	44%

Table 3.6 shows that only about half of those returning the questionnaires responded to these items. It is probable that not too many of the teachers in this sample who left this item blank had direct contact with the consultants except for an in-service training session. The majority of those responding did rate the services provided as helpful or very helpful.

TABLE 3.7

RESPONSES OF PRINCIPALS REGARDING SPECIAL NEEDS OF HANDICAPPED CHILDREN

How do you rate the following services provided by the Special Education Diagnostic and Resource Center in terms of meeting special needs of handicapped children in your school?

1. e. Services provided for your teachers by the consultants or social workers

Response	N = 83	Percent of Response
Very Helpful		13%
Helpful		48%
Of Little Help		10%
No Help		7%
Detrimental		0
Left Item Blank		22%

f. Materials and/or equipment available for use or loan to your building

Response	
Very Helpful	16%
Helpful	40%
Of Little Help	7%
No Help	7%
Detrimental	0
Left Item Blank	30%

Table 3.7 shows the responses of the eighty-three principals who returned questionnaires. The majority of those returning the questionnaire did rate the services of the consultants and materials and/or equipment available as being either helpful or very helpful. About one-fourth of those returning the questionnaires failed to rate these services.

Principals were also asked whether or not they or members of their staff received special materials from the resource consultant. Forty-two responded yes, and thirty-four indicated no. Seven failed to respond. Another part of this question related to the affirmative answers on the first part. Some selected types of materials were listed for those who received it to rate. Results of these ratings are given in Table 3.8.

TABLE 3.8

RESPONSES OF PRINCIPALS REGARDING
SPECIAL MATERIALS AVAILABLE

2. a. Did you or members of your staff receive special materials from the resource consultant?
Yes 42 No 34 Did not respond 7

b. If "yes" on the above question, then rate the use of the following types of materials and/or equipment only if you received it.

		Rating				
	Item	Very Helpful	Helpful	Of Little Help	No Help	Detrimental
1.	Peabody Language Development Kit	4	7	0	0	0
2.	Films	4	7	1	0	0
3.	Film strips	5	4	3	0	0
4.	Language Master	8	5	2	0	0
5.	Special books for pupils	12	5	2	0	0
6.	Special books for teachers	7	8	1	0	0
7.	Frostig materials	4	19	0	0	0
8.	Tapes and/or records	5	6	0	0	0
9.	Other special materials, please list below and rate					
	a. Guitar	1	0	0	0	0

In Table 3.8, 110 ratings of helpful or very helpful were given to the eight specific kinds of materials or equipment listed. Nine ratings of little help were also given. The number of ratings is larger than the number of respondents because more than one item could be rated by one respondent.

PROVISION OF IN-SERVICE TRAINING PROGRAMS

One segment of the supportive services was the provision of in-service growth programs for teachers, administrators, parents, and others. A variety of programs were presented on sixteen different topics including thirty-seven sessions. The total number attending does not represent 1,567 different people. This is a duplicated count with some people attending more than one session on the same topic or more than one program. The count was determined by asking those attending to register as they enter, and records of those who registered were kept by the center. A listing of programs, the number of sessions, dates, and the number attending are shown in Table 3.9.

In order to assess the interest in and the quality of presentation at the in-service training programs, school counselors, school nurses, speech clinicians, principals, non-Title III teachers, and supplementary classroom teachers were asked on the questionnaire to check the programs they attended and to rate the quality of that program. The number and percent of return of questionnaires for these groups are presented in three tables presented earlier in this report. The number of ratings and the percent in each category by the program is presented in Table 3.10.

TABLE 3.9

IN-SERVICE TRAINING PROGRAMS

Program	Date	Sessions	Number Attending
Valley Center Institute Grades Kdg. - 2	Aug. 23	2	32
Frostig Materials Workshop	Sept. 21-23	3	405
Music Therapy and Use of Music with Exceptional Children	Sept. 26	1	94
Language Master Cards Workshop	Sept. 28	1	39
Resource Workshop in Language Arts, Social Studies, and Science Secondary Level	Oct. 4-5, 13	5	101
Follow-Up on Frostig Materials	Oct. 13, 17 and Nov. 21	5	121
Training Session for Parents	Oct 24	1	26
Developmental Visual Perception	Nov. 21	1	33
Consultative Service for Title III Personnel	Nov. 27	1	12
Training Session for Parents	Nov. 28	1	25
IRA Training Session	Jan. 25	1	17
The Subordination of Teaching and Learning	Jan. 30-31	3	126
Education for Sexuality (County and Parochial)	Jan. 30 Feb. 12-16	7	163
Reading Improvement K-12	Feb. 23	2	190
Speech and Language Disturbances	Feb. 29	2	151
ITPA Workshop	March 26	1	32
Total 16		37	1567

TABLE 3.10

RESPONSES OF SCHOOL COUNSELORS, SCHOOL NURSES, SPEECH CLINICIANS, PRINCIPALS, NON-TITLE III TEACHERS, AND SUPPLEMENTARY CLASSROOM TEACHERS REGARDING IN-SERVICE TRAINING PROGRAMS

Program	Number Rating	Percent Rating		
		Good	Fair	Poor
Music Therapy and Use of Music with Exceptional Children	7	100%		
Frostig Materials	102	81%	17%	2%
Language Master Cards	10	100%		
Follow-Up Frostig Materials	47	90%	10%	
Developmental Visual Perceptions	26	69%	27%	4%
Subordination of Teaching and Learning	48	40%	15%	45%
Education for Sexuality (County and Parochial)	79	80%	16%	4%
Reading Improvement	52	90%	10%	
Speech and Language Disturbances	36	89%	11%	
Total 9	407	82%	12%	6%

As shown in Table 3.10, those rating the various programs indicated that about four out of five considered the program and/or presentation good. Not all of the different programs were rated because of the samples chosen for receiving questionnaires. Only two of the nine different programs which received ratings had fewer than eighty percent rating the program less than good. No particular conclusions can be based on the data in the table due to the fact that all groups included in getting the total ratings may view different topics from varied points of view. It does, however, indicate to some degree that those attending the in-service programs provided by the center feel that the general quality of the programs or presentations is good.

ADDITIONAL SERVICES

PROVISION OF REGIONAL LIBRARY FOR VISUALLY HANDICAPPED

A deficiency was identified in library and curriculum materials available for visually handicapped and blind children. To meet this need, a library was established in one room at the diagnostic center. This library not only served the Title III project area but was the regional library for the state of Kansas. Library books, both braille and large print, along with talking books, records, tapes, realia, and books for reading pleasure, were made available through the library. Pictures, maps, charts, transparencies, as well as optical aides were made available for loan to teachers or librarians so that enrichment materials were available to visually handicapped or blind children.

OBJECTIVES

1. To supply better library service to presently known visually handicapped pupils.
2. To identify additional children needing these services.
3. To maintain better academic progress for pupils with visual handicaps.
4. To create more productive social interchange between pupils.

5. To sharpen insights in better ways of teaching all children.
6. To serve as a model for replication of services in other regional libraries.

Activities in which the librarian engaged during the year included the following:

1. Meeting teachers to determine needs.
2. Selecting and organizing books and materials.
3. Getting acquainted with volunteer braille groups.
4. Coordinating the efforts of the volunteer groups.
5. Promoting the use of the library by way of mail, telephone, and personal contact.

The librarian is responsible for the selection of materials, record keeping, the production center, filing, and the loan and retrieval of all materials. A part time clerical aide was available for part of these responsibilities. Since this was the first year of operation for the library, most of the time spent by the librarian was devoted to selecting, ordering, and organizing materials. Ideally her time should be divided between the project area and the remainder of the state. The peripatologist consultant provided assistance in ordering equipment and promoted the services of the library.

A variety of materials, equipment, and realia was made available for use in the project area as well as the entire state. Approximately sixty percent of the service during the first year was performed in the

Title III project area. Table 3.11 shows the number of schools or areas served by the library in terms of materials checked out during the year.

TABLE 3.11

NUMBER OF SCHOOLS, TOWNS, AND INDIVIDUALS CHECKING OUT MATERIALS FROM VISUALLY HANDICAPPED AND BLIND LIBRARY

Type of Agency	Number
Wichita Schools	
Elementary	11
Junior High	5
Senior High	1
Private	1
Other cities or towns	28
Individuals	10

No exact record was maintained on checking out materials to other agents in other cities or towns. It is unknown how many schools or individual pupils were served by the materials checked out in this manner. The librarian estimates fifty schools had requested and received materials. Records were kept by type of material checked out. Numbers of each type checked out are shown in Table 3.12.

TABLE 3.12

TYPE AND NUMBER OF MATERIALS CHECKED OUT FROM VISUALLY HANDICAPPED AND BLIND LIBRARY

Type of Material	Number Checked Out
Books	
1. Regular	689
2. Large Print	44
3. Braille	112
Sub-Total	845
Recorded Discs	85
Games and Charts	29
Magnetic Tapes	28
Talking Books	11
World Books (sets)	1
Dictionaries	5
Realia	8
Perkins Brailler	4
Total	1016

As given in the table, more than one thousand items were checked out for usage from the library for the first year of operation. The librarian also indicated that approximately five hundred people had visited the library during the year and that the usage of materials increased sharply nearer the end of the school year. Fifteen hundred small brochures were distributed by mail and personal contacts at various professional meetings.

Materials were borrowed from the regional library in St. Louis, Missouri for re-distribution from the library at the center. Efforts are being made through the state department to provide more materials and service to the visually handicapped on a state wide basis.

The library is administered through the local applicant agency for the Title III project. There may have been some evidence of other libraries in the local school system utilizing materials, procedures, etc., developed by the library for the visually handicapped. Some materials provided are purchased through Title II funds. It appears to be a cooperative effort with materials and funds provided from several sources. At the present it is too early to tell the effects of these additional services. An effort will be made to evaluate these effects further during the next year.

PROVISION OF PERIPATOLOGIST SERVICES

The peripatologist consultant is responsible for assisting school personnel who serve visually handicapped children regarding materials, equipment, education adjustments, and social or physical problems. One of his primary responsibilities is to provide basic orientation and mobility instruction to visually handicapped pupils who need this training for independent functioning.

Seventeen pupils were served on a regular basis concerning mobility training. Additional contacts were made with parents, teachers, administrators, and others concerning the needs or planning programs for visually handicapped children. A summary of services performed by the peripatologist is given in Table 3.13.

TABLE 3.13

SERVICES PERFORMED BY PERIPATOLOGIST

Type of Service	Number Performed In Wichita	Number Performed Outside Wichita
1. Parent Counseling	22	6
2. Staff conference	33	9
3. Orientation - Mobility or Related Services	20	3
4. Furnish Materials - Equipment	29	8
5. Referrals, Evaluations, etc.	10	1
Number of pupil contacts	423	38

Services provided by the peripatologist should be equally divided between the project area and most of the remainder of the state. Due to working with the establishment of the library for visually handicapped and promotion of its services, the peripatologist was unable to maintain a perfect balance between in-district and out-of-district service according to time spent. According to reports submitted by the peripatologist, service was provided to sixteen towns and cities outside the Wichita district.

A recreational program was established for secondary school age students with visual handicaps. A local roller skating rink provided the facility and furnished skates for visually handicapped students twice a month. Transportation was the responsibility of the parents, and arrangements for release from school the last period of the day was the pupil's responsibility. Another activity provided was swimming at the Y. W. C. A. This was also scheduled twice a month; however, this was held after school hours. Parental permission was required in writing to travel and participate in either or both of the activities. Recreational activities were also planned to continue through the summer months. These activities were established to provide the visually handicapped student further socialization with others and the necessary physical activity needed to maintain healthy bodies.

The peripatologist consultant submitted complete case reports on two of the students receiving mobility training. All students receiving mobility training received an initial as well as periodic evaluation from the peripatologist. These evaluations concerned such areas as attitude toward travel, interest, self-confidence, balance, posture, distance judgement, use of cane if cane training had been provided, and ability to travel without assistance.

One of the cases reported was a fifteen year old boy who was totally blind and who received instruction in basic pre-cane protective techniques, indoor cane techniques, grounds and campus orientation and travel, residential travel (without traffic lights), and business district orientation. The consultant reported exceptional growth and progress in view of the amount of time available for instruction and training.

The second case reported was a twelve year old boy who had been evaluated as making extensive progress with the long cane. Continuation of training and an increase in the number of weekly periods of instruction was recommended.

The consultant also reported that the need for mobility training is increasing and that an additional nine students (outside of Wichita) would need these services during the coming year.

Approximately three and one-third percent of the Title III project budget is involved in providing the additional services of the peripatologist consultant and the library for visually handicapped and blind students. Indications are apparent that cooperation among state supported programs and services and other federally funded projects can be obtained. The provision of these additional services seems to enhance the effectiveness of the project in providing services for various types of handicapped children.

PART 4

SUPPLEMENTARY CLASSROOM PROGRAMS

This project proposed the establishing of supplementary programs in the following areas: emotionally disturbed and socially maladjusted, trainable mentally handicapped, severely orthopedically handicapped, hearing handicapped, and learning disabilities.

During the year, thirteen supplementary classrooms were in operation in six different elementary schools and in three junior high schools in the Wichita district. Each building principal was responsible for the supplementary classrooms in addition to all other duties of administering a school. The building principals were aided and advised by the project director and the coordinators at the Diagnostic Center.

This section of the report deals with the individual evaluation of each classroom. General comments and summaries will be presented in the final part of the report.

LEARNING DISABILITIES - ELEMENTARY, LEVEL I

One supplementary classroom for pupils with learning disabilities, grades one to three, was provided during the year. These pupils exhibited unusual behavioral and perceptual handicaps that apparently were not primarily caused by emotional disturbances or social maladjustments. Pupils were included if they had indications of neurological pathology, brain injury, hyperactive behavior, and undifferentiated disabilities.

OBJECTIVES

1. To enable pupils to achieve academically at levels appropriate to age, grade, and intelligence.
2. To improve the pupils' ability to express themselves in non-verbal areas.
3. To discover and devise effective teaching techniques and superior instructional materials for pupils with learning disabilities.
4. To improve attitudes toward self, school, and others.
5. To improve and further develop motor skills and coordination.
6. To improve personal and social adjustments so that successful reentry into the regular classroom can be effected.

METHODS AND PROCEDURES

A qualified classroom teacher guided the activities in the classroom. A maximum load of eight pupils was maintained throughout the year. The use of a part-time teacher aide helped enable the teacher to individualize the instruction.

A variety of materials and equipment was used in working with learning disability pupils. Detailed listings of these appear in Appendix B.

Pupils worked primarily on an individual basis at levels of difficulty commensurate with their indicated abilities. More work was devoted to areas considerably below expected grade level in order to bring up the deficiencies as rapidly as possible. Supportive services provided by the consultants in art, music, and physical education were designed to give the pupils experiences in non-academic but expressive areas. As pupils progressed to a point where it appeared they would profit from instruction in the regular classroom, they were phased back into the regular classroom programs.

Most pupils, when placed in the classroom, scored in the "normal" range of intelligence on individual intelligence measures. Many were deficient in one or more academic areas. Language and arithmetic skills were emphasized heavily. Development of social skills were emphasized more the nearer the time came to phase back into regular programs.

PUPILS PLACED IN CLASSROOM

Examination of pupil records maintained by the teacher and other school personnel yielded the following information about the pupils:

Age range at entrance: 7 years, 8 months to 10 years, 2 months
Race: All Caucasian
Sex: Eight male - one female

A total of nine pupils were placed in the classroom, six at the beginning of the school year, one more approximately one month later, and the eighth in late November. One of the pupils was returned to regular class in February. A new pupil was then staffed into the class late in March. A maximum class load of eight was maintained.

Attendance information indicates that while assigned to the special classroom the pupils' attendance varied from a low of ninety-one percent to a high of ninety-eight percent. The mean attendance for those enrolled was ninety-five percent.

PUPIL RESULTS

The Peabody Picture Vocabulary Test was used as a pretest, post-test measure of verbal ability. Eight of the nine pupils placed in the class had both pretest and posttest scores. Results of the PPVT are presented by individual pupils in Appendix B, Table 2, and include the May test scores for the pupil placed late in the year. Summarized results are presented in the following tables.

TABLE 4.1

PEABODY PICTURE VOCABULARY TEST RESULTS FOR LEARNING DISABILITIES - ELEMENTARY, LEVEL I

N = 8	October	May
Raw Score Mean	67.8	68.1
Raw Score Median	66	67
Raw Score Range	56-78	59-80
Standard Deviation	8.1	7.0
Standard Score Mean	97.4	93.9
Standard Score Median	100	92
Standard Score Range	80-111	80-114
Standard Deviation, Standard Score	11.7	11.3

Form A of the Peabody Picture Vocabulary Test was used in October and Form B used in May. As shown in Table 4.1, mean and median raw scores increase slightly, while the standard score mean and median decrease to a greater degree. This may be attributed to slight differences in norming tables from one form to the other. An additional factor is the fact that the pupils had an increase in chronological age of seven months while their mental age remained nearly the same or decreased slightly as a result of getting nearly the same raw score on both forms.

The number of gains or losses in standard score points and raw score points reflect the problem just mentioned.

TABLE 4.2

FREQUENCY OF GAINS AND LOSSES IN RAW SCORE AND STANDARD SCORE POINTS (PPVT), LEARNING DISABILITIES ELEMENTARY, LEVEL I

Raw Sccres	N
Gain	
5 - 9 points	1
0 - 4 points	6
Loss	
1 - 5 points	1
6 - 10 points	1
11 or more points	0

Standard Scores	N
Gain	
5 - 9 points	2
0 - 4 points	1
Loss	
1 - 5 points	2
6 - 10 points	1
11 or more points	2

The Wide Range Achievement Test was used as a measure of basic skills in reading, spelling, and arithmetic. It was believed earlier that results would provide a measure of academic progress. Complete results are given in Table 3 in Appendix B for all pupils, while group results are summarized in the following table.

4.6

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR LEARNING DISABILITIES - ELEMENTARY, LEVEL I

N = 8	October	May
Reading Subtest		
G. E. Mean	2.1	1.8
G. E. Median	1.8	2.3
G. E. Range	Kg. 8 - 3.5	1.6 - 4.7
Raw Score Mean	37.6	46.0
Raw Score Median	35	42
Raw Score Range	20 - 54	30 - 62
Spelling Subtest		
G. E. Mean	2.0	2.3
G. E. Median	1.8	2.1
G. E. Range	1.3 - 3.0	1.5 - 3.7
Raw Score Mean	26.5	28.5
Raw Score Median	26	27
Raw Score Range	21 - 34	23 - 37
Arithmetic Subtest		
G. E. Mean	2.1	2.9
G. E. Median	2.0	2.7
G. E. Range	Kg. 5 - 3.6	2.1 - 4.2
Raw Score Mean	21.5	26.1
Raw Score Median	21	25
Raw Score Range	12 - 29	22 - 31

The supplementary classroom teachers were asked to rate the progress of the pupils in the areas of reading, spelling, and arithmetic. The frequency of ratings are shown in Table 4.4 for the same group of eight pupils used in Table 4.3

TABLE 4.4

FREQUENCY OF TEACHER RATINGS IN READING,
SPELLING, AND ARITHMETIC - LEARNING DISABILITIES, LEVEL I

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Growth in:				
a. Reading	6	1	1	0
b. Spelling	4	1	2	1
c. Arithmetic	3	5	0	0

The frequency of gains or losses in grade equivalents in each subtest for the WRAT is given in Table 4.5.

TABLE 4.5

FREQUENCY OF GAINS OR LOSS IN G. E. ON WRAT SUBTESTS
LEARNING DISABILITIES - ELEMENTARY LEVEL, I

Subtest	G. E. Gain			G. E. Loss
	1.0 - 1.4	0.5 - .9	0 - .4	
Reading	1	6	1	0
Spelling	0	2	6	0
Arithmetic	2	5	1	0

Table 4.3 shows that on the average the group gained seven months in reading, two months in spelling, and eight months in arithmetic as measured by the WRAT. This agrees with the frequency of gains in half

year intervals as shown in Table 4.5. The teacher rated moderate to much growth for seven of the eight pupils in reading, five of the eight in spelling, and all eight in arithmetic. A comparison of teacher ratings in each area as opposed to gain scores shown in that area is given in Table 4.6. Only seven of the eight pupils for which scores were available were rated, hence only twenty-one tallies are shown in the table.

TABLE 4.6

COMPARISON OF TEACHER RATING AND PUPIL GAIN OR LOSS IN G. E. ON THE WIDE RANGE ACHIEVEMENT TEST

Teacher Rating / Gain or Loss in G. E.	G. E. Loss	Gain 0 - .4	Gain .5 - .9	Gain 1.0 - 1.4	Totals
Much	0	2	8	2	12
Moderate	0	2	3	1	6
Slight	0	1	1	0	2
Little or None	0	1	0	0	1
					21

As indicated in Table 4.6, of twenty-one ratings given by the teacher for observed growth in reading, spelling, and arithmetic, fourteen who were rated as having moderate to much growth also gained one-half to a year and one-half as measured by the scores on the WRAT.

The Goodenough - Harris Drawing Test was used to obtain a measure of intellectual maturity. The means of standard scores on the pretest posttest for the previous eight pupils are listed below.

Man		Woman		Self	
Oct.	May	Oct.	May	Oct.	May
80.4	88.8	73.0	82.8	76.0	88.8

A complete listing of scores on all pupils is found in Appendix B, Table 4.

The classroom teachers were also asked to rate growth they had observed in positive changes in attitude. These are related to some extent to the results previously mentioned. The attitudinal change was rated in the areas of self, school, and others. Results of the frequency of teacher ratings are given in Table 4.7.

TABLE 4.7

FREQUENCY OF TEACHER RATINGS OF OBSERVED POSITIVE GROWTH IN ATTITUDES - LEARNING DISABILITIES LEVEL I

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
2. Positive change in attitude toward:				
a. Self	6	2	0	0
b. School	5	2	1	0
c. Others	6	1	0	0

In the listings of pretest and posttest means for the group on the Goodenough - Harris Drawing Test, one can observe a gain in standard scores of 12.8 for the self subtest. In table 4.7, the teacher rated observed positive change in attitude toward self to be moderate to much in all eight pupils.

Since the three standardized tests used have standard score means of 100 and a standard deviation of 15, these become useful in comparing directly each pupil's performance from one test to another. The standard scores for each pupil in this group are presented in Table 4, Appendix B.

Limitations inherent in testing situations apply to these results. It can be observed in Table 4, Appendix B, that of the fifty-six pairs of pretest and posttest scores, some indicated gain was shown in seventy-three percent of the pairs, while eleven pairs showed an indicated loss and four pairs gave an indication of no difference in score.

Three pupils in this group have been in the program since the fall of 1966. Table 4.8 gives a comparison of test results at three points in time for these three pupils.

TABLE 4.8

TEST RESULT COMPARISONS FOR PUPILS
IN THE PROGRAM TWO YEARS

Pupil 1

WRAT

	Nov. '66		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	1.9	85	2.7	87	3.5	90
Spelling	1.4	79	2.0	80	2.2	78
Arithmetic	2.1	87	2.2	82	2.8	84

GHDT

	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	77	6	75	5	89	23
Woman	72	3	79	2	82	12
Self	77	6	74	4	87	19

PPVT

	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
	93	40	88	24	84	16

Pupil 2

WRAT

	Nov. '66		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	2.2	92	3.5	103	4.7	106
Spelling	2.0	89	2.9	96	3.0	90
Arithmetic	1.8	87	2.8	95	3.6	96

GHDT

	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	84	14	90	25	99	47
Woman	80	9	87	19	84	14
Self	75	5	90	25	102	55

PPVT

	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
	126	96	120	92	114	83

TABLE 4.8
(continued)

Pupil 3			WRAT			
	Nov. '66		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	N. V.*	N. V.*	Kg. 8	73	1.6	78
Spelling	1.2	85	1.3	80	1.5	77
Arithmetic	2.4	103	1.8	87	2.2	85
			GHDT			
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	66	1	81	10	77	6
Woman	64	1	79	8	86	18
Self	72	3	84	14	89	23
			PPVT			
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
	95	40	95	42	83	12

*Test administrator indicated results not valid

A question can now be raised: what has been recommended for these pupils? According to recommendations from the Evaluation Committee, pupil number one was recommended for trial placement in the Title III Learning Disabilities Classroom, Level II for the 1968-69 school year. Recommendations for pupil number two included transfer back to regular classes at the base school. Pupil number three moved to another district and is attending regular classes.

The end of the year staffing reports show that of the eight pupils in the class at that time, recommendations made by the committee were that three would remain in the Learning Disabilities Level I classroom, three would be placed in the L. D. Level II classroom, and two would return to the base school to attend regular classes.

CLASSROOM SUPPORTIVE SERVICES

One of the objectives of the classroom was to improve the pupils' ability to express themselves in non-verbal areas. Art work was an area in which students were allowed to express themselves in non-verbal ways. This classroom was one of six supplementary classrooms in which the art consultant conducted a study. The description of the study was presented in the preceding part of this report. Only results of this particular sub-group are presented here.

Part of the study consisted of presenting eight plates (8½" x 11") with predetermined marks on them. The pupils were then instructed to draw anything as long as they used the provided marks as part of the drawing. The sets of eight plates for each pupil were then evaluated by the art consultant on the basis of specific criteria. This procedure was followed three times during the school year resulting in three scores per pupil, one for each evaluation. Results available on seven pupils are shown in Table 5, Appendix B. A summary is given in Table 4.9. No further analysis was done at this point, but scores should provide a base line for further investigation.

TABLE 4.9

POSSIBLE SCORES AND MEANS FOR
EVALUATIONS BY ART CONSULTANT

Possible score per set	40
Possible total (3 sets)	120
Group November Mean	22.8
Group February Mean	19.8
Group April Mean	24.7
Individual Set Mean	22.6

The art consultant assisted the teacher by providing project ideas and supplied the appropriate media. Painting, cut and torn paper murals, painting to music, and ceramic clay work were included in the art activities for this class.

Another objective for this class was to improve and further develop motor skills and coordination. The physical education consultant provided assistance in visits to the classroom as well as equipment and a program of exercises and games. In order to measure the success or failure of the program and to aid the consultant in determining what kinds of activities the students should or should not participate in, the American Association of Health, Physical Education, and Recreation Youth Fitness Test was administered in the fall and again in the spring. The means and ranges of those having both pretest and posttest scores is shown in Table 4.10. A table of individual scores is given in Table 6, Appendix B.

TABLE 4.10

RESULTS OF AAHPER YOUTH FITNESS TEST FOR FIVE BOYS IN LEARNING DISABILITIES - ELEMENTARY LEVEL I

Measures	Fall Test	Spring Test	Gain
Pull-ups (number)			
Mean	1	2	1
Range	0 - 3	0 - 6	0 - +3
Sit-ups (number)			
Mean	18.4	35.0	16.6
Range	8 - 33	9 - 93	-5 - +77
Shuttle Run (seconds)			
Mean	11.5	13.7	2.2
Range	13.9 - 9.4	14.1 - 12.8	+5.0 - -.9
Standing Broad Jump (inches)			
Mean	34.2	45.6	11.4
Range	28 - 44	33 - 52	3 - 20
50-Yard Dash (seconds)			
Mean	11.0	9.8	-1.2
Range	12.2 - 9.4	11.8 - 9.2	-.3 - -2.0
Softball Throw (feet)			
Mean	41.8	43.0	1.2
Range	21 - 55	25 - 56	-7 - 12
600-Yard Run-Walk (minutes)			
Mean	2.56	2.22	-.34
Range	2.80 - 1.83	2.76 - 1.80	-.03 - -.81

It can be seen in Table 4.10 that as a group this class had some gain in most activities from the fall testing to the spring testing. Individual gains and losses can be observed in Table 6, Appendix B. One noticeable gain can be observed in the pupil who completed 16 sit-ups in the fall and 93 in the spring while losing five seconds in the shuttle run. In other cases it can be seen that performance was poorer in the spring in some activities than in the fall.

Activities included in the program of physical education for this group centered around skipping, hopping, galloping, walking, running, recognition of body parts, obstacle course work, ball throwing and catching, and safety. The largest improvement as observed by the consultant was in the area of balance, coordination, and locomotor abilities.

The music consultant's objectives for this group were to develop a "liking" for music activities, to improve rhythmical behavior and to reinforce perceptual training done by the teacher.

Early activities included various music activities geared primarily toward enjoyment. The consultant attempted to reassure the pupils that anything they did musically was acceptable. A point system was used which resulted in the children being able to earn 10 points per session for participation in music. Participation was observed to increase by both the teacher and the consultant. During the last eleven weeks of the school year, the pupils were able to participate in a thirty-minute music session with a favorite music activity constituting the reward rather than the points.

"Syncopated Coordination" from Educational Rhythmics for Mentally Handicapped Children by Ferris and Jennet Robbins was used in an attempt to modify rhythmical behavior. The music consultant summed up progress in this group as follows: "Rhythmical behavior appeared improved in all but one student. Two weeks prior to the last quarter a metronome was played at various speeds and the pupils were asked to walk or run to it. Four could do it without error, one responded correctly occasionally, and one was unable to respond correctly. This same procedure was conducted at the beginning of the year using rhythm instruments and piano. All children except one responded correctly only occasionally."

During November one of the pupils in the class was phased out part-time to regular classes in the building housing the special classroom. At the May, 1968 staffing, the committee recommended that he return to his base school for the 1968-69 school year. A year-end report from the school shows that he had earned a grade of C in Language, Spelling, and Writing, and a grade of B in Reading, Arithmetic, Social Studies, and Science.

Three other pupils who had been in this classroom the previous year had returned to regular classes at their base school. Reports of progress at the end of the first year after returning show a slight gain in academic achievement over the year prior to entering the program.

One pupil was selected from each classroom for further investigation. The selection was not made on a random basis but as a result of a joint effort between the Center staff, the classroom teacher, and members of the Research Division. The pupil selected from each classroom was not primarily representative of the type of pupil placed in that specific classroom, but it was the intent to make the case study pupils representative of the types of handicaps within the supplementary classroom program. The following is the summary for the pupil selected from the Learning Disabilities - Level I classroom.

CASE STUDY SUMMARY

Background Information

Family Information

The subject was a male Caucasian born in December, 1959. He had two younger siblings, one male and one female. The family resided in a middle-class neighborhood. The father had a master's degree in industrial engineering and was employed by a local aircraft company. The mother was a housewife, although she had completed college and worked as a medical technologist until her children were born. The parents appeared to have accepted the subject's problems relatively well.

Health History

The subject was born with the umbilical cord wrapped around his neck two or three times. It took thirty minutes to revive him. It is generally believed that brain injury occurred at this time.

During the first weeks of infancy, the subject had diarrhea which was eventually traced to food allergies. Up to three years of age he contracted various infections. These included pneumonia, bronchitis and ear infections. A high fever accompanied the ear infections with his temperature rising to 105 degrees and lasting twelve hours. A tonsillectomy performed when he was three and one-half years of age resulted in great health improvement. He had chicken pox and German measles. Nose bleeds were once a problem, but were eventually corrected.

The subject walked at sixteen months. He talked very little at three years of age. The family pediatrician believed that he represented "a true brain-injured child, probably dating to the birth history, and the typical hyperkinetic behavior problem."

School Achievement and Adjustment

The subject was enrolled in a local pre-school for the retarded at the age of three. He attended until he was six at which time he was enrolled in a kindergarten class in one of the public schools. He attended that school for two years. During the first grade, he attended only half days as he could not tolerate an entire day. At the close of his year in first grade, school personnel referred him to the Diagnostic Center. Behavior which necessitated the referral included constant, seemingly uncontrollable activity, irrelevant remarks, and hitting other children. Academically the subject had difficulty with reading, not remembering sounds at all. Some days he knew several words, other days he knew none at all. Arithmetic performance was described as average. His best performance occurred in art. He was able to stay in his seat while doing this.

Referral, Evaluation, Recommendations and Placement

Referral

In March, 1967, a referral form for the subject was processed by the Center. Due to behavioral aspects, consideration for placement in the classroom for children with learning disabilities was requested. Center personnel including a staff school psychologist and staff social worker were assigned to the case.

Evaluation

With the parents' permission the staff social worker requested and obtained the subject's medical records from the family pediatrician. A social history was also obtained from the family by the social worker.

A psychological evaluation was done by the staff school psychologist. Tests administered to the subject included the Illinois Test of Psycholinguistic Abilities and The Frostig Developmental Test of Visual Perception. It was found that the subject was three and one-half years below grade level in auditory decoding and one and one-half years below grade level in visual decoding. In auditory vocal and visual motor association, he was two to two and one-half years below grade level. Figure-ground relationships were problematic to the subject.

Scores obtained from the Wide Range Achievement Test were 1.5 in Reading, 1.6 in Spelling, and Kg. 5 in Arithmetic. The Peabody Picture Vocabulary Test yielded a raw score of 68, a mental age of eight years and five months, and an IQ of 104.

A speech and hearing evaluation conducted by the clinician at the Center revealed no abnormalities.

Recommendations and Placement

The Diagnostic and Evaluative Admissions Committee of the Center had a staffing during September, 1967. Information was presented by personnel of the sending school. The Center staff members who had had direct contact with the subject and family shared their findings and information with the committee. The following recommendations were made:

(1) Trial placement in the classroom for children with learning disabilities.

(2) After a period of observation, a medical evaluation should be arranged if deemed necessary.

As a result of these recommendations, the subject was placed in the classroom for children with learning disabilities in September, 1967. In November, 1967, the Center referred the subject to a psychiatrist with the idea in mind that some medication might be provided to help the subject become more amenable to the classroom setting and decrease his hyperactivity. This resulted in medication being prescribed by the psychiatrist.

Objectives, Procedures and Results

Objectives

The main objectives were to develop appropriate classroom behavior, to teach the subject to read with comprehension and fluency, and to develop arithmetic concepts and automatic responses of number facts.

Procedures and Results

At the beginning of the year, the subject displayed many behaviors which made him a very unlikely candidate for any classroom. These included constant moving about the room, talking out, and touching other children. Traditional procedures to alleviate these behaviors resulted in no change in the subject's behavior. Following the referral made to a psychiatrist in November, which resulted in the subject being given some medication, the above behavior decreased considerably. For example, before the subject was taking medication the teacher kept a record of how many times he talked out during various twenty-minute periods. After he was given the medication she did the same thing. The results can be seen in the following table:

TABLE 4.11

FREQUENCY OF TALK-OUTS OCCURRING IN TEN TWENTY-MINUTE PERIODS BEFORE AND AFTER MEDICATION

SESSIONS	FREQUENCY BEFORE	FREQUENCY AFTER
1	11	1
2	8	3
3	9	3
4	11	2
5	12	4
6	8	1
7	10	2
8	10	2
9	11	3
10	11	5

Following medication, the subject was able to participate in learning activities appropriately. However, talk of bugs and reproduction occurred frequently.

Materials and techniques used in teaching reading consisted of the Language Master (Bell and Howell) and typewriter together for building vocabulary, taped stories and books to develop sentence vocabulary, taping the pupil's own voice reading a story, exercises in following directions, auditory closure tasks from Remedial Reading Drills (Hegge, Kirk, and Kirk), and visual motor exercises (Kephart: Perceptual Copy Forms, Winterhaven Publication Committee, 1965; Sutphin: Perceptual Training Handbook for First Grade Teachers, Winterhaven Research Foundation, 1964).

In the area of arithmetic concepts, exercises in auditory association such as repeating verbatim a group of numbers, verbatim repetition of number facts, and practice in repeating numbers in sequence were used. Visual motor exercises consisted of arranging and rearranging objects and having the child name them in order, plus having the child reproduce verbally a row of numbers that were removed from sight.

In both of the above areas of learning, the subject was able to attend and progress subsequent to being given medication. Results of the Wide Range Achievement Test as given by the staff school psychologist in the spring consisted of 2.3 in Reading, 1.8 in Spelling, and 2.6 in Arithmetic. These scores represent a growth, as measured by this test, of nearly an entire grade in reading, a slight growth in spelling, and a growth of over two grades in arithmetic. The Peabody Picture Vocabulary Test scores remained the same.

It should be noted that behavior modification procedures which consisted of allotting the pupils points for appropriate behaviors were in effect during the year. The pupil earning the most points each week was able to take a guinea pig home for the weekend. The teacher believed that these procedures were very instrumental in effecting and maintaining appropriate behavior in the classroom.

Center staff consultants in art, music, and physical education worked with the subject on a regular basis. The resource consultant provided the classroom with various materials and demonstrated their use to the teacher. Specific activities conducted by the consultants are described under the Classroom Supportive Services topic in this section.

The art consultant noticed a definite change in the subject after he began taking medication. He was able to stay in his seat and work and could follow directions better. His creativeness was rated high, however, no organization was shown in his drawings according to the art consultant.

Participation in music activities was very good after the subject began medication. Initially he seemed reluctant to participate but did so eagerly after he had realized some success. All music sessions moved from a highly structured activity to one of loose structure. If this procedure was not followed, the subject did not respond appropriately socially or musically. The subject had difficulty responding correctly rhythmically. This did improve, however, as the year progressed. At the beginning of the year the rhythmical behavior of the subject was described as "chaotic." At the end of the year the subject was able to emit correct rhythmical behavior occasionally.

The physical education consultant reported that it was impossible to begin any program with the subject the first ten weeks of school. Subsequent to being placed on medication, however, it was possible to begin a program for him. An AAHPER and modified Kraus-Weber test was administered in the fall and spring (See Part 5 for description of modification). The tests yielded the following results:

TABLE 4.12

AAHPER FALL AND SPRING SCORES
CASE STUDY PUPIL - LEARNING DISABILITIES LEVEL I

Measures	Fall	Spring
Push-ups (number)	0	0
Sit-ups (number)	21	16
Shuttle Run (seconds)	13.9	12.8
Standing Broad Jump (inches)	30	33
50-Yard Dash (seconds)	9.9	9.7
Softball Throw (feet)	38	25
600-Yard Run-Walk (minutes)	2.8	2.0

TABLE 4.13

KRAUS-WEBER FALL, WINTER AND SPRING SCORES
CASE STUDY PUPIL - LEARNING DISABILITIES LEVEL I

	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Total
Fall	.25	.25	.3	.3	.3	6	1.4
Winter	1	2	3	4	5	6	6
Spring	1	2	3	4	5	6	6

It was believed by all of the Center staff that the subject had made good progress during his year in the classroom. Though he still was not working on grade level in academic subjects, the growth he made in these areas was very substantial. How far he could progress in the future was still questioned. Realistically, it was believed that with the type of damage the subject had, he would never be average classroom material. However, it was felt that special education could still contribute a great deal toward developing the pupil into an effective individual.

At a staffing held in May, 1968, it was recommended that he be placed in the classroom for children with learning disabilities again for the 1968-69 school year. It was also recommended that a case review be held after the first quarter.

LEARNING DISABILITIES - ELEMENTARY, LEVEL II

Pupils with learning disabilities, grades four to six, were provided one supplementary classroom. These pupils exhibited unusual behavior and perceptual handicaps that apparently were not primarily caused by emotional disturbances or social maladjustments. Pupils were included if they had indications of neurological pathology, brain injury, hyperactive behavior, and undifferentiated disabilities.

OBJECTIVES

1. To enable pupils to achieve academically at levels appropriate to age, grade, and intelligence.
2. To discover and devise effective teaching techniques and superior instructional materials for pupils with learning disabilities.
3. To aid in the development of visual and motor skills.
4. To improve the pupils' attitude toward self, school, and others.
5. To enable pupils to improve their ability to express themselves in non-verbal areas.
6. To enable pupils to reenter the regular program in reasonable lengths of time.

METHODS AND PROCEDURES

A qualified classroom teacher was selected to guide the activities in this classroom. A maximum class load of ten students was maintained throughout the year. The use of a part-time teacher aide helped enable the teacher to individualize instruction.

A variety of materials and equipment was used in working with this level of learning disabilities pupils. Detailed listings of these appear in Appendix B of this report.

Pupils worked primarily on an individual basis at levels of difficulty commensurate with their indicated abilities. More work was devoted to areas considerably below expected grade levels in order to bring up the deficiencies as rapidly as possible. Supportive services provided by the curriculum consultants in art, music, and physical education were designed to give the pupils experiences in building non-academic but expressive areas. As pupils progressed to a point where it appeared they would profit from instruction in the regular classroom, they were phased back into regular classroom programs.

Pupils placed in the classroom scored in the "normal" range of intelligence on individual intelligence measures. Several were deficient in one or more of the areas of reading, language, and arithmetic. Development of social skills was emphasized more heavily when pupils began to indicate they were ready to phase back into the regular program.

PUPILS PLACED IN CLASSROOM

Examination of pupil records maintained by the teacher and other school personnel yielded the following information about the students:

Age range at entrance: 9 years, 3 months to 12 years, 6 months

Race: All Caucasian

Sex: Eleven male - one female

A total of twelve pupils were placed in the classroom. Seven were placed at the beginning of the year, two were added two weeks later, and one was added another three weeks after that. One pupil moved out of the area and a second was returned to regular classes the second week in October. Two pupils were then placed the last of November, maintaining a total of ten students in the classroom for the remainder of the school year.

Attendance information indicates that while assigned to the special classroom the pupils' attendance varied from a low of eighty-five percent to one-hundred percent.

PUPIL RESULTS

The Peabody Picture Vocabulary Test was utilized as a pretest, posttest measure of verbal ability. Eleven of the twelve pupils placed in the class had both pretest and posttest scores. Results of the PPVT are presented by individual pupils in Table 7, Appendix B. Summarized results are presented in the following table.

TABLE 4.14

PEABODY PICTURE VOCABULARY TEST RESULTS FOR LEARNING DISABILITIES - ELEMENTARY, LEVEL II

N = 11	October	May
Raw Score Mean	78.1	79.2
Raw Score Median	81	79
Raw Score Range	62 - 86	70 - 94
Standard Deviation	7.7	7.1
Standard Score Mean	96.9	93.6
Standard Score Median	98	91
Standard Score Range	69 - 115	82 - 111
Standard Deviation, Standard Score	12.6	7.5

Form A of the Peabody Picture Vocabulary Test was used in October, and Form B was used in May. As observed in Table 4.14, the raw score mean increased slightly while the standard score mean decreased to a greater degree. This is due in part to slight differences in norm distributions from one form to the other. An additional factor is that the pupils had an increase in chronological age of seven months while their mental age remained nearly the same or decreased slightly as a result of getting nearly the same raw score on both forms.

The number of gains or losses of raw score points and standard score points reflect the problem just mentioned.

TABLE 4.15

FREQUENCY OF GAINS AND LOSSES IN RAW SCORE AND STANDARD SCORE POINTS (PPVT), LEARNING DISABILITIES ELEMENTARY, LEVEL II

Raw Scores	N
Gain	
5 - 9 points	3
0 - 4 points	3
Loss	
1 - 5 points	4
6 - 10 points	1
11 or more points	0

Standard Scores	N
Gain	
10 or more points	1
5 - 9 points	2
0 - 4 points	0
Loss	
1 - 5 points	3
6 - 10 points	2
11 or more points	3

The Wide Range Achievement Test was used as a measure of basic skills in reading, spelling, and arithmetic. It was believed earlier that results would provide a measure of academic progress. Complete results are given in Table 8, Appendix B for all pupils, while group results are summarized in the following table.

TABLE 4.16

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR LEARNING DISABILITIES - ELEMENTARY, LEVEL II

N = 11	October	May
Reading Subtest		
G. E. Mean	2.7	3.2
G. E. Median	2.0	2.5
G. E. Range	Kg. 8 - 6.2	1.2 - 7.5
Raw Score Mean	40.5	43.5*
Raw Score Median	38	46
Raw Score Range	20-62	20 - 63
Spelling Subtest		
G. E. Mean	2.2	2.6
G. E. Median	2.0	2.6
G. E. Range	1.2 - 3.7	1.2 - 4.0
Raw Score Mean	25.4	25.8*
Raw Score Median	26	29
Raw Score Range	10 - 36	7 - 36
Arithmetic Subtest		
G. E. Mean	2.8	3.3
G. E. Median	2.9	3.2
G. E. Range	2.1 - 3.6	2.2 - 4.5
Raw Score Mean	24.3	24.9*
Raw Score Median	24	27
Raw Score Range	12 - 29	12 - 32

*Includes one pupil's score, using different form in May

The supplementary classroom teachers were asked to rate the progress of the pupils in the areas of reading, spelling, and arithmetic. The frequency of ratings is shown in Table 4.17 for the same group of eleven pupils used in the previous table.

TABLE 4.17

FREQUENCY OF TEACHER RATINGS IN READING,
SPELLING, AND ARITHMETIC - LEARNING DISABILITIES, LEVEL II

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Growth in:				
a. Reading	5	4	2	0
b. Spelling	3	6	2	0
c. Arithmetic	5	3	3	0

The frequency of gain or losses in grade equivalents in each subtest for the WRAT is given in Table 4.18.

TABLE 4.18

FREQUENCY OF GAINS OR LOSSES IN G. E. ON WRAT SUBTESTS
LEARNING DISABILITIES - ELEMENTARY, LEVEL II

Subtest	G. E. Gain			G. E. Loss
	1.0 - 1.5	0.5 - 0.9	0 - 0.4	
Reading	1	2	8	0
Spelling	1	4	5	1
Arithmetic	1	2	7	0

Table 4.16 reveals that, on the average, the group gained five months in reading, four months in spelling, and five months in arithmetic, as measured by the WRAT. One might expect to find this in observing the frequency of gains as shown in Table 4.18. The teacher rated growth of moderate to much for nine of the eleven pupils in reading and spelling, and eight of the eleven in arithmetic. No rating of little or none was given by the teacher, while of all subtest gains on the WRAT, six had no gains and one subtest score indicated a loss in grade equivalent. A comparison of teacher rating in each area as opposed to gain scores shown in Table 4.18 is given in Table 4.19.

TABLE 4.19

COMPARISON OF TEACHER RATING AND PUPIL GAIN OR LOSS IN G. E. ON THE WIDE RANGE ACHIEVEMENT TEST

Teacher Rating	G. E. Loss	Gain 0 - 0.4	Gain 0.5 - 0.9	Gain 1.0 - 1.5	Totals
Much	0	3	6	4	13
Moderate	1	10	2	0	13
Slight	0	7	0	0	7
Little or None	0	0	0	0	0
Gain or Loss in G. E.					33

As indicated in Table 4.19, twelve of the thirty-three ratings of moderate to much growth as observed by the teacher also gained one-half year to a year and one-half as measured by the differences on the pre and post scores on the WRAT. One can also see that fourteen of the ratings of moderate to much by the teacher had indicated gains of less than half a year or an indicated loss as measured by the differences in WRAT scores.

The Goodenough - Harris Drawing Test was used to obtain a measure of intellectual maturity. The means of the standard scores on the pretest and posttest for the above eleven pupils are listed below. A complete listing of scores on all pupils is found in Table 9, Appendix B.

Man		Woman		Self	
Oct.	May	Oct.	May	Oct.	May
83.5	91.5	78.0	84.9	83.4	86.1

The classroom teacher was also asked to rate growth observed in positive changes in attitude. These are related to some extent to the results previously mentioned. The attitudinal change was rated in the areas of self, school, and others. Results of the frequency of teacher ratings are given in Table 4.20.

TABLE 4.20

FREQUENCY OF TEACHER RATINGS OF OBSERVED POSITIVE GROWTH IN ATTITUDES - LEARNING DISABILITIES, LEVEL II

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
2. Positive change in attitude toward:	Much	Moderate	Slight	Little or None
a. Self	8	3	0	0
b. School	3	6	2	0
c. Others	2	7	2	0

Among the pretest and posttest means of standard scores for the group on the Goodenough - Harris Drawing Test, there was an indicated growth of 2.7 as measured by the Self subtest. In Table 4.20 one sees that the teacher rated moderate to much growth in a positive direction on all eleven pupils toward self.

Since the three standardized tests used have standard score means of 100 and a standard deviation of 15, these become useful in comparing directly each pupil's performance from one test to another. The standard scores for each pupil in this group are presented in Table 9, Appendix B.

Limitations inherent in testing situations also apply to these results. Even though the same person administered both the pretest and the posttest, the sensitivity of the instruments to small changes limits the usage of these results on a group basis.

In mid-October, two pupils returned to regular classroom schedules. One returned to the regular room in another school in the system, while the other attended the same school that housed the special classroom. Later in the year the first pupil moved to a school in a district outside of the project area. It is difficult to relate academic progress in terms of grades earned by these pupils because of a different type of grading system used in the special class. Both pupils were able to continue in regular classes and were reported to have received passing grades at the end of the year.

Test results were available for six pupils who had been in the classroom the previous year. These results are shown in Table 4.21.

TABLE 4.21

TEST RESULT COMPARISONS FOR STUDENTS IN THE PROGRAM MORE THAN ONE YEAR

Pupil 1			WRAT			
	May '67		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	1.9	76	2.0	79	2.9	83
Spelling	1.4	71	1.8	75	2.6	80
Arithmetic	1.6	73	2.4	80	3.6	88
			GHDT			
	May '67		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	107	68	112	79	128	97
Woman	125	95	98	45	118	88
Self	110	75	104	61	101	53
			PPVT			
	May '67		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
	74	4	90	26	87	23

Pupil 2			WRAT			
	Nov. '66		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	1.6	76	1.9	74	2.3	72
Spelling	1.2	72	1.7	73	1.8	68
Arithmetic	2.1	81	2.4	78	2.6	74
			GHDT			
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	84	14	86	18	90	25
Woman	76	5	84	14	79	8
Self	79	8	92	29	92	29
			PPVT			
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
	118	89	109	71	98	48

TABLE 4.21
(continued)

Pupil 3	WRAT					
	Nov. '66		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	2.0	80	2.1	76	2.5	73
Spelling	2.0	80	2.2	77	2.0	69
Arithmetic	2.4	84	3.0	83	3.0	77
	GHDT					
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	79	8	69	2	95	37
Woman	85	16	62	1	85	16
Self	79	8	69	2	95	37
	PPVT					
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
	118	89	115	84	96	38

Pupil 4	WRAT					
	Nov. '66		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	3.9	104	4.7	106	4.8	101
Spelling	3.5	103	3.5	95	3.5	90
Arithmetic	2.8	92	3.2	92	3.6	91
	GHDT					
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	71	3	70	2	75	5
Woman	67	1	67	1	69	2
Self	70	2	62	1	75	5
	PPVT					
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
	100	50	98	47	95	34

TABLE 4.21
(continued)

Pupil 5	WRAT					
	Nov. '66		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	1.4	64	1.6	66	2.0	69
Spelling	1.3	63	1.7	67	2.3	71
Arithmetic	2.1	70	2.4	72	2.8	75
	GHDT					
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	70	2	81	10	88	21
Woman	77	6	79	8	87	19
Self	75	5	81	10	87	19
	PPVT					
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
	91	24	98	46	91	26

Pupil 6	WRAT					
	Nov. '66		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	2.9	83	3.0	77	3.0	74
Spelling	1.8	73	2.6	74	3.0	74
Arithmetic	3.0	77	3.6	81	4.5	85
	GHDT					
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	83	13	80	9	87	19
Woman	78	7	65	1	72	3
Self	88	21	82	12	84	14
	PPVT					
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
	110	75	106	67	90	22

Among the six pupils whose comparative scores are shown in Table 4.21, one observes an indicated growth according to the WRAT in all those areas except spelling on pupils three and four. Growth is less than one might expect, however, the instruments are not sensitive enough to measure small gains but are useful indicators when used on an individual basis.

The question might arise as to what is recommended for these pupils. According to the end of the year staffing reports, the following recommendations were made. Pupil number one was to return to his base school and regular classes. Pupil number two was also to return to his base school and to regular classes. Recommendations for pupil number three included returning to his base school as no positive purpose was being served in special placement. Pupil number four was to return to his base school with placement in a flexible situation. Pupil number five was to return to his base school and regular classes, while pupil number six had returned to regular classes during the year.

Among the ten pupils in the classroom at the end of the school year, the staffing reports from the Evaluative Committee show that five were recommended to return to the base school and regular classes; three were to remain in the same classroom for the 1968-69 school year; and two were recommended to be placed in the next level learning disabilities room in the Title III program.

CLASSROOM SUPPORTIVE SERVICES

One of the objectives of the classroom was to improve the pupils' abilities to express themselves in non-verbal areas. Art work is an area in which pupils are allowed to express themselves in non-verbal ways. The art consultant conducted a study in six of the supplementary classrooms of which this classroom was one. The description of the study was presented in a later part of this report. Only the results of this particular sub-group are presented below.

Part of the study consisted of presenting eight plates ($8\frac{1}{2}$" x 11") with predetermined marks on them. The pupils were then instructed to draw anything as long as they used the marks provided as part of the drawing. Sets of eight plates for each pupil were then evaluated by the art consultant on the basis of specific criteria. This procedure was followed three times during the year, resulting in three scores per pupil, one for each evaluation. Results available on ten pupils are given in Table 10, Appendix B. A summary of these is given in Table 4.22. No further analysis was done at this time, but the scores should provide a base line for further investigation.

TABLE 4.22

POSSIBLE SCORES AND MEANS FOR
EVALUATIONS BY ART CONSULTANT

Possible score per set	40
Possible total (3 sets)	120
Group November Mean	21.6
Group February Mean	19.1
Group April Mean	21.7
Individual Set Mean	20.8

In order to assist the teacher in striving for the objectives, the art consultant also provided project ideas and supplied the appropriate media. The physical rigidity found in this group prompted the art consultant to use "exercises" to try to gain greater freedom in their art expressions. Painting to music and "quick" drawings were used for this purpose. The consultant felt that the objectives were not reached at the desired level anticipated at the beginning of the year.

Another objective for the class was to improve and further develop motor skills and coordination. The physical education consultant provided assistance in visits to the classroom as well as equipment and a program of exercises and games. In order to help measure the success or failure of the program and to aid the consultant in determining what kinds of activities to provide for these students, the American Association of Health, Physical Education, and Recreation Youth Fitness Test was administered in the fall and again in the spring. The means and ranges of those having both sets of scores are shown in Table 4.23. A table of individual scores is given in Appendix B, Table 11.

TABLE 4.23

RESULTS OF AAHPER YOUTH FITNESS TEST FOR LEARNING DISABILITIES - ELEMENTARY, LEVEL II

Measures	Fall Test	Spring Test	Gain
Pull-ups (number)			
Mean	1.6	1.3	-.3
Range	0 - 5	0 - 7	-1 - +4
Sit-ups (number)			
Mean	25.2	26.1	.9
Range	0 - 33	9 - 41	-10 - +22
Shuttle Run (seconds)			
Mean	11.4	11.4	0
Range	15.6 - 9.1	16.8 - 11.3	+3.8 - -2.6
Standing Broad Jump (inches)			
Mean	41.8	47.6	5.8
Range	23 - 62	34 - 64	-5 - +27
50-Yard Dash			
Mean	9.2	7.0	2.2
Range	13.0 - 8.0	12.0 - 8.2	+.2 - -3.3
Softball Throw			
Mean	49	51.4	2.4
Range	21 - 80	19 - 107	-2 - 40
600-Yard Run-Walk (minutes)			
Mean	1.78	1.16	.62
Range	2.58 - 1.42	2.50 - 1.26	+.04 - -.35

Table 4.23 shows that as a group gains are indicated in sit-ups, the standing broad jump, the 50 yard dash, the softball throw, and the

60C-yard run-walk. An indicated loss is shown in pull-ups, and no gain in time in the shuttle run is shown. Individual gains and losses are indicated by Table 11, Appendix B. Nine of the twelve tested both in the fall and spring had gains in at least three of the seven activities on the test. Only one had better scores in all areas. Some pupils had an indicated poorer performance in the spring than in the fall.

Activities included in the physical education program were skipping, hopping, galloping, walking, running, recognition of body parts, obstacle course work, ball throwing and catching, and safety. The greatest improvement as reported by the consultant was in control of physical skills such as walking, skipping, hopping, and galloping with the least improvement shown in throwing and catching balls of different sizes.

In addition to objectives stated earlier, the music consultant also had objectives for this group. These objectives included developing a "liking" for musical activities, improving rhythmical behavior, and preparing for the "normal" music class by presenting basic music concepts (identification of instruments, notes and time values, and musical symbols).

The initial activities in music were geared primarily toward enjoyment. An attempt was made to modify rhythmical behavior using "Syncopated Coordination" by Ferris and Jennet Robbins. This required the pupil to respond rhythmically to music at first with only one part of the body, then with alternating parts, and finally with more than one part. Rhythm instruments were introduced in a game-like situation for identification by sight and sound. Notes and how they are counted met with little success until it was presented incorporating arithmetic. Later the pupils were able to play notes by number on the melodica.

Results reported by the consultant included fifty percent of the pupils progressing from low to very high in "liking" or interest in music, and the other fifty percent progressing from average to high. These percentages were determined from teacher reports of pupil requests to listen to music independently and active participation in classroom music activities.

Rhythmical behavior improved so that eighty percent of the class was able to maintain appropriate rhythmical movement consistently, and ten percent were able to respond appropriately in spurts. Ten percent could not respond appropriately.

The consultant also reported observing at least five occasions in which the teacher incorporated music into other areas such as phonics, spelling, and writing.

One pupil was selected from each classroom for further investigation. The selection was not made on a random basis but as a result of a joint effort between the Center staff, the classroom teacher, and members of the Research Division. The pupil selected from each classroom was not primarily representative of the type of pupil placed in that specific classroom, but it was the intent to make the case study pupils representative of the types of handicaps within the supplementary classroom program. The following is the summary for the pupil selected from the Learning Disabilities, Level II classroom.

CASE STUDY SUMMARY

Background Information

Family Information

The subject was a male Caucasian born in March, 1957. He had one younger male sibling. The family moved to this city from another country in 1967. They resided in a middle-class neighborhood. The father was employed as a draftsman at a local aircraft company. He completed the 12th grade. The mother was a housewife. She stated that she was an alcoholic, however, she seemed to be able to control her problem. She received psychiatric counseling before moving to this city, but still appeared rather unstable. Serious problems seemed to exist in the marriage, the father lacking understanding and being unemotional, while the mother constantly sought attention and affection, though apparently incapable of giving any. Both parents agreed, however, that they wanted help for their children.

Health History

The subject was born weighing nine pounds and fifteen ounces. According to the mother, pregnancy was normal with labor lasting forty-eight hours. During his first two years, the subject had continuous tonsillitis infections to the point where eating was a problem due to swelling. Strained baby foods and liquids were his diet at these times. While having tonsillitis, the subject often ran temperatures of 104 and 105 degrees. On one occasion he went into convulsions. His tonsils were removed when he was almost two years old.

The subject walked at thirteen months of age and talked soon after. Short sentences were used when he was two years old. He was toilet trained at the age of two. He had the usual childhood diseases, none severely.

School Adjustment and Achievement

The subject experienced continual failure in the classroom. When attending the first grade, he was taken out because it was believed that he was too immature to start school. He was enrolled again in the first grade at the age of eight, and at that time school personnel stated he was retarded. He was placed in a room for educable and trainable mentally retarded children for three months, at which time the parents removed him because he was imitating some of the behaviors of the severely retarded children.

Referral, Evaluation, Recommendations and Placement

Referral

The family moved to this city from a foreign country in the summer of 1967. During June, 1967, a referral form for the subject was processed by the Center. A diagnostic evaluation was recommended. Center personnel including a staff school psychologist and staff social worker were assigned to the case. The subject was referred by the Center to a medical doctor for a physical examination.

Evaluation

Psychological tests administered to the subject included the Wechsler Intelligence Scale for Children, Illinois Test of Psycholinguistic Abilities, Frostig Developmental Test of Visual Perception, and the Wide Range Achievement Test. The tests indicated that educationally, the subject was a "disadvantaged" child. He was approximately two grades behind in academic subjects. Very low scores were obtained in automatic vocal responses to auditory stimuli. Strong areas consisted of auditory and visual decoding (assimilation of materials) and motor encoding (expressing himself through action). The psychologist believed that test results suggested a learning disability.

A physical examination revealed no anomalies. Neurological testing did not suggest brain damage; however, other facets of the physician's visit with the subject supported the findings of the staff school psychologist. The physician hypothesized that the boy might have a specific reading disability or possibly an obscure type of neurological recognition syndrome.

Recommendations and Placement

The Diagnostic and Evaluative Admissions Committee of the Center held a staffing during September, 1967. The subject had been enrolled in the school of his district in August since the recommended Title III classroom was filled to capacity. Personnel from the school attended the staffing and reported on his school progress. Center staff members who had had direct contact with the subject and family shared their findings.

The following recommendations were made:

(1) Trial placement in the classroom for children with learning disabilities.

(2) The Diagnostic Center will send a referral to a clinical psychologist asking for an evaluation.

(3) The staff social worker will stay in contact with the family.

(4) The Center staff should discuss the type of therapy that would lend maximum help to the whole family.

As a result of these recommendations the subject was placed in the classroom for children with learning disabilities.

Objectives, Procedures and Results

Objectives

The main objectives were to develop appropriate classroom behavior and to develop basic skills in reading, spelling, and arithmetic.

Procedures and Results

A phonics approach was used in reading and spelling. Materials used included Hammond's Consonantal Blends - Set 1, Learning to Read with Phonics (Teaching Aids Institute), and Singing Sounds (Bowmar Records of Los Angeles). The E. D. L. Reading Machine (McGraw - Hill) was also employed as was the Language Master (Bell and Howell).

In the area of arithmetic, materials used included the Laidlaw and SRA math programs, and Musical Multiplication Tables (Brenner).

Materials from the Frostig Visual Perception Program were used regularly for visual perception training.

Behavior modification techniques which involved allotting points for academic and social behaviors were used throughout the year. Expected social and academic behaviors were initially defined to the pupils and they in turn were responsible for behaving appropriately. The pupil receiving the most points at the end of the week was able to take a rabbit home for the weekend.

At the beginning of the year the subject displayed several deficits which hindered his academic and social progress. His work habits were very poor. He was not able to finish anything and frequently "misplaced" books and "lost" assignments. He apparently did not have any self-motivation and could not produce anything without constant adult help. He was openly critical of his peers and often cruel in his verbal ridiculing of their clothes, manners and looks. Peer relationships were reportedly not good.

Academically, the subject was reading on a pre-primer level when he entered the program. Though his tests scored late first grade level, he actually could not read fluently in any book. He appeared to have no phonics background. Arithmetic comprehension, in actual practice, was on primary level. He could not write numerals to 100 and could not solve even the most simple addition or subtraction fact without an abacus.

The subject needed constant reassurance at first that he was not retarded. He began to make a few independent attempts to work and responded quite well to the point system. It was important to him to earn as many or more than the other class members. By the second semester, the teacher reported that he was doing well in all daily assignments but that retention was not always good. He often displayed a pattern typical of children with learning disabilities; some days he would do very well, other days very poorly.

Social behavior improved somewhat, apparently as a result of the point system. As the year progressed, weekly sessions on "Handling Our Feelings" appeared to give him some insight into his often cruel behavior toward others. He began to interact with the others, but only one at a time. He usually had a different "buddy" every day.

At the end of the year the teacher felt that very significant progress had been made by a child who had literally "quit" as far as school was concerned. Though the subject still had a very long way to go, the teacher felt that he was capable of advancing since the "stage for learning had been set."

Teacher reports that the subject had made academic progress were substantiated by testing done in the spring. Scores received on the Wide Range Achievement Test consisted of 2.2 in Reading, 2.6 in Spelling, and 3.2 in Arithmetic.

Staff consultants in art, music, and physical education worked with the subject on a regular basis. The resource consultant provided materials for the classroom and demonstrated their use to the teacher. Specific activities conducted by the consultants are described under Classroom Supportive Services topic of this section.

The art consultant believed that, based on his drawings, the subject had grown in self-concept during the year. He seemed less afraid to express himself although he was continually in need of adult help and motivation and would seldom produce without them.

In the music area the subject was able to execute many musical behaviors very well. He had excellent pitch discrimination and was able to pick out melodies on the piano and melodica with no help. Finger dexterity on these instruments was good as was coordination and rhythm. The music consultant believed that music was an area in which the subject could very easily excel. Social behavior, however, needed improvement. Inappropriate remarks to the consultant and others in the class decreased somewhat when ignored or when the subject was asked to leave the group.

The physical education consultant reported that initially the subject was afraid of getting dirty, thus being reluctant to participate. However, when it was emphasized that physical education was necessary to help us look and feel better he became less reluctant to participate. Results of the AAHPER and modified Kraus-Weber tests administered in the fall and spring can be seen in the following tables (See Part 5 for description of modification).

③

TABLE 4.24

AAHPER FALL AND SPRING SCORES
CASE STUDY PUPIL - LEARNING DISABILITIES, LEVEL II

Measures	Fall	Spring
Pull-ups (number)	0	2
Sit-ups (number)	16	22
Shuttle Run (seconds)	13.9	11.3
Standing Broad Jump (inches)	37	64
50-Yard Dash (seconds)	10.1	8.6
Softball Throw (feet)	70	70
600-Yard Run-Walk (minutes)	2.5	2.4

TABLE 4.25

KRAUS-WEBER FALL, WINTER AND SPRING SCORES
CASE STUDY PUPIL - LEARNING DISABILITIES, LEVEL II

	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Total
Fall	1	2	3	4	5	0	5
Winter	1	2	3	4	5	0	5
Spring	1	2	.3	4	5	6	5.3

A staffing was held in May, 1968. All Center staff members who had worked with the subject agreed that progress had been made, but that the subject needed much additional help before remediation could be deemed sufficient to move him into a regular classroom. It was recommended that the subject remain in the classroom for children with learning disabilities for the 1968-69 school year. In addition it was recommended that the parents enroll the subject in a recreation and swimming program for the summer to provide an opportunity for the development of some positive peer relationships.

LEARNING DISABILITIES - JUNIOR HIGH LEVEL

One supplementary classroom was provided for junior high age pupils with learning disabilities. Pupils placed in this classroom had unusual behavioral and perceptual handicaps which were not primarily caused by emotional disturbances or social maladjustments. Pupils were included if they had indications of impairments such as: aphasia, neurological pathology, brain injury, hyperactive behavior, and undifferentiated disabilities.

OBJECTIVES

(1) To enable pupils to achieve academically at levels appropriate to age, grade, and intelligence.

(2) To improve the pupils' abilities to express themselves in non-verbal areas.

(3) To discover and devise effective teaching techniques and superior instructional materials for pupils with learning disabilities.

(4) To improve attitudes toward self, others, and school

(5) To improve personal and social adjustments so that satisfactory contacts with environment can be made and reentry into regular classrooms can be effected.

METHODS AND PROCEDURES

Activities in the classroom were conducted and guided by a qualified classroom teacher. A maximum class load of ten pupils was maintained throughout the school year. Scheduling of part of the students into the regular classrooms at various times in the day resulted in the teacher not having all assigned students in her room at any one period during the day.

A variety of materials and equipment was used to work with this level of learning disabilities pupils. Listings as to types of materials and equipment are presented in Appendix B.

Pupils worked primarily on an individual basis at levels of difficulty commensurate with their indicated abilities. More work was devoted to those areas in which the level was below the expected level for that particular age child in order to attempt to raise these as rapidly as possible. Supportive services provided by the curriculum consultants in art, music, and physical education were designed to give the pupils experiences in nonacademic but expressive areas. As stated earlier, some pupils in this classroom also attended regular classrooms such as art, physical education, woodwork, and music. As the pupils progressed to a point where it appeared that they would profit from the instruction in a regular classroom, they were phased back into the regular programs and finally returned to their base school.

Most pupils, when placed in this classroom, scored in the "normal" range of intelligence on individual intelligence measures. Many were deficient in one or more academic areas. Language, reading, and arithmetic skills were emphasized. Development of social skills was emphasized more heavily the nearer the time came to phase a pupil back into the regular classroom program.

PUPILS PLACED IN CLASSROOM

Examination of pupil records maintained by the teacher and other school personnel yielded the following information about the pupils:

Age range at entrance: 12 years, 8 months to 14 years, 11 months

Race: All Caucasian

Sex: Six male - six female

A total of twelve pupils were placed in the classroom, eight at the beginning of the year. One pupil returned to the regular classroom program at the base school during October. Approximately one month later three more pupils were placed bringing the total back to a maximum of ten pupils. Another pupil was returned to regular classroom programs at the base school the last of February with the other nine remaining until the end of the school year.

Attendance information shows that while assigned to the special classroom the pupils' attendance varied from a low of eighty-one percent to a high of one-hundred percent. The mean attendance for those enrolled was ninety-three percent.

PUPIL RESULTS

The Peabody Picture Vocabulary Test was used as a pretest, posttest measure of verbal ability. All twelve of the pupils placed had both pretest and posttest scores. Results of the PPVT are presented by individual pupils in Appendix B, Table 12. Summarized results are given in Table 4.26.

TABLE 4.26

PEABODY PICTURE VOCABULARY TEST RESULTS FOR LEARNING DISABILITIES - JUNIOR HIGH

N = 12	October	May
Raw Score Mean	88.9	90.9
Raw Score Median	87	91
Raw Score Range	75 - 113	73 - 108
Standard Deviation, Raw Scores	10.6	9.7
Standard Score Mean	95.0	95.8
Standard Score Median	93	97
Standard Score Range	80 - 125	78 - 118
Standard Deviation, Standard Scores	12.0	10.0

Form A of the Peabody Picture Vocabulary Test was used in October, and Form B was used in May. Those pupils entering the class later in the year were tested upon entrance with their score reported as an October or pretest score. As indicated in Table 4.26 the group mean raw score and mean standard score both increased slightly. Individual gains and losses are reflected in Table 12, Appendix B.

The number of gains or losses in standard score and raw score points are given in Table 4.27.

TABLE 4.27

FREQUENCY OF GAINS AND LOSSES IN RAW SCORE AND STANDARD SCORE POINTS (PPVT), LEARNING DISABILITIES - JUNIOR HIGH

Raw Scores	N
Gain	
10 or more points	1
5 - 9 points	3
0 - 4 points	3
Loss	
1 - 5 points	4
6 -10 points	1

Standard Scores	N
Gain	
10 or more points	1
5 - 9 points	2
0 - 4 points	4
Loss	
1 - 5 points	2
6 -10 points	2
11 or more points	1

As noticed in Table 4.27, the number of gains or losses is the same for both the raw scores and the standard scores. The difference lies in the distribution of those making gains between zero and nine points or losses between one and ten points.

The Wide Range Achievement Test was used as a measure of basic skills in reading, spelling, and arithmetic. It was believed earlier that results would provide a measure of academic progress. Complete results are given for individuals in Table 13, Appendix B. Group results are summarized in the following table.

TABLE 4.28

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR LEARNING DISABILITIES - JUNIOR HIGH

N = 11	October	May
Reading Subtest		
G. E. Mean	5.6	6.3
G. E. Median	5.0	6.2
G. E. Range	1.7 - 12.8	1.3 - 14.1
Raw Score Mean	35.4	38.8
Raw Score Median	32	38
Raw Score Range	18 - 67	16 - 72
Spelling Subtest		
G. E. Mean	4.7	5.2
G. E. Median	4.3	4.9
G. E. Range	2.2 - 11.6	2.2 - 10.8
Raw Score Mean	13.8	15.7
Raw Score Median	12	14
Raw Score Range	6 - 39	6 - 37
Arithmetic Subtest		
G. E. Mean	4.3	4.9
G. E. Median	3.4	4.4
G. E. Range	2.9 - 7.7	2.9 - 9.0
Raw Score Mean	15.2	16.7
Raw Score Median	13	15
Raw Score Range	12 - 26	12 - 29

The supplementary classroom teachers were asked to rate the progress of the pupils in the areas of reading, spelling, and arithmetic. The frequency of ratings is shown in Table 4.29 for the same eleven pupils used in Table 4.28.

TABLE 4.29

FREQUENCY OF TEACHER RATINGS IN READING, SPELLING, AND ARITHMETIC - LEARNING DISABILITIES, JUNIOR HIGH

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Growth in:				
a. Reading	0	11	0	0
b. Spelling	0	9	2	0
c. Arithmetic	1	7	2	1

The frequency of gains or losses in grade equivalents in each subtest for the WRAT is given in Table 4.30.

TABLE 4.30

FREQUENCY OF GAINS OR LOSSES IN G. E. ON WRAT SUBTESTS LEARNING DISABILITIES - JUNIOR HIGH

N = 11 Subtest	G. E. Gain			G. E. Loss
	1.0 or above	0.5 - 0.9	0 - 0.4	
Reading	4	3	3	1
Spelling	2	3	5	1
Arithmetic	6	1	2	2

Table 4.28 shows that, on the average, the group gained seven months in reading, five months in spelling, and six months in arithmetic, as measured by the WRAT. The gains agree with the frequencies in half year intervals given in Table 4.30. The teacher rated moderate growth for all eleven in reading, nine of the eleven in spelling, and moderate to much growth in eight of the eleven in arithmetic. A comparison of teacher rating in each area as opposed to gain scores as measured by the WRAT is presented in Table 4.31.

TABLE 4.31

COMPARISON OF TEACHER RATING AND PUPIL GAIN
OR LOSS IN G. E. ON THE WIDE RANGE ACHIEVEMENT TEST

Teacher Rating	G. E. Loss	Gain 0 - 0.4	Gain 0.5 - 0.9	Gain 1.0 or above	Totals
Much	0	1	0	0	1
Moderate	2	7	7	11	27
Slight	1	2	0	1	4
Little or None	1	0	0	0	1
Gain or Loss in G. E.					33

As indicated in Table 4.31, of thirty-three ratings given by the teacher for observed growth in reading, spelling, and arithmetic, eighteen who were rated as having moderate growth also gained one-half year to nearly two years as measured by pre-post scores on the WRAT. Implications from observing the results might lead one to believe there is some relation between gain scores made on the WRAT and teacher rating. No analysis was performed at this time.

4.64

The Goodenough - Harris Drawing Test was used to obtain a measure of intellectual maturity. The means of the standard scores on pretest and posttest for the previous eleven pupils are listed below. A complete listing of scores on all pupils is found in Table 14, Appendix B.

Man		Woman		Self	
Oct.	May	Oct.	May	Oct.	May
78.2	81.8	70.6	78.5	73.8	78.8

The classroom teacher was also asked to rate growth she or he had observed as positive changes in attitudes toward self, school, and others. These may be related to some extent to the results previously mentioned. Results of the frequency of ratings are given in Table 4.32.

TABLE 4.32

FREQUENCY OF TEACHER RATINGS OF OBSERVED POSITIVE GROWTH IN ATTITUDES - LEARNING DISABILITIES, JUNIOR HIGH

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
2. Positive change in attitude toward:				
a. Self	2	8	1	0
b. School	0	10	1	0
c. Others	1	9	1	0

In the difference of means in standard scores of the Self subtest on the Goodenough - Harris Drawing Test, one observes a difference of five standard score points in the positive direction. At the same time the teacher ratings show that ten of eleven pupils were believed to have moderate to much growth in the positive direction.

Since the three standardized tests used have standard score means of 100 and a standard deviation of 15, these become useful in comparing directly each pupil's performance from one test to another. The standard score mean for each pupil in this group is presented in Table 14, Appendix B.

Limitations inherent in testing situations apply to these results. Even though the same person administered both the pretest and the posttest, the sensitivity of the instruments to small changes limits any thorough analysis of these test results. From the eighty-one pairs of standard scores in Table 14, Appendix B, sixty-one percent show some gain, eleven percent remain the same, and twenty-eight percent indicate some loss.

Five pupils in this group were in the junior high learning disabilities room the previous year. Two other pupils were in the second level learning disabilities room the previous year. Table 4.33 gives a comparison of test results at three different points in time for these five pupils.

TABLE 4.33

TEST RESULT COMPARISONS FOR STUDENTS IN THE PROGRAM TWO YEARS

Pupil 1

WRAT

	Nov. '66		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	----	---	12.8	130	14.1	133
Spelling	----	---	11.6	123	10.8	114
Arithmetic	----	---	7.7	99	9.0	103

GHDT

	May '67		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	64	1	60	1	60	1
Woman	50	1	51	1	64	1
Self	50	1	53	1	64	1

PPVT

May '67		Oct. '67		May '68	
S. S.	%ile	S. S.	%ile	S. S.	%ile
117	86	125	94	118	89

Pupil 2

WRAT

	May '67		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	7.5	98	8.1	98	9.9	104
Spelling	4.3	74	4.0	74	5.5	80
Arithmetic	2.3	71	3.4	71	4.4	74

GHDT

	May '67		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	87	19	89	23	80	9
Woman	84	14	80	9	70	2
Self	87	19	84	14	86	18

PPVT

May '67		Oct. '67		May '68	
S. S.	%ile	S. S.	%ile	S. S.	%ile
106	71	95	42	99	44

TABLE 4.33
(continued)

Pupil 3

WRAT

	May '67		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	6.0	89	6.3	90	7.1	92
Spelling	6.7	91	6.8	93	8.1	98
Arithmetic	5.3	84	5.3	84	6.5	89

GHDT

	May '67		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	75	5	66	1	65	1
Woman	66	1	63	1	56	1
Self	63	1	63	1	56	1

PPVT

May '67		Oct. '67		May '68	
S. S.	%ile	S. S.	%ile	S. S.	%ile
94	37	92	33	96	52

Pupil 4

WRAT

	May '67		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	4.8	81	5.8	82	6.2	87
Spelling	5.0	82	4.3	78	5.2	81
Arithmetic	4.2	77	2.9	69	3.9	74

GHDT

	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	73	4	66	1	82	12
Woman	69	2	61	1	95	37
Self	73	4	66	1	95	37

PPVT

Nov. '66		Oct. '67		May '68	
S. S.	%ile	S. S.	%ile	S. S.	%ile
91	30	81	8	98	50

TABLE 4.33
(continued)

Pupil 5	WRAT					
	May '67		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	1.7	61	1.7	61	1.3	58
Spelling	2.2	64	2.2	64	2.6	67
Arithmetic	3.4	72	3.4	72	3.9	74
	GHDT					
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	109	73	108	71	115	84
Woman	111	77	96	39	105	63
Self	98	45	108	71	108	71
	PPVT					
	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
	110	75	105	63	92	36

Test results are not the only consideration given in determining what might be the best educational plan for a child. For the above five pupils the Evaluative Committee, at the end of the school year, recommended that pupil number three remain in the junior high special room for the 1968-69 school year, pupil number four remain in the junior high special room with phasing into as many regular classes as possible, and pupil number five remain in the junior high special room with possible associated work in remedial reading. Pupils number one and two were returned to regular classes during the year. Pupil number one returned in October, and pupil number two returned in February. No further information was available on the two pupils who returned to regular classes.

Of the ten pupils in the special classroom at the end of the school year, staffing reports reveal that six of the ten were recommended to remain in the junior high learning disabilities room for the 1968-69 school year, one to return to regular classes in the same building, and two to be reviewed during the summer with recommendations to be made at a later date. One pupil moved out of the state.

CLASSROOM SUPPORTIVE SERVICES

Two of the objectives for the junior high level learning disabilities class were to improve the pupils' attitudes toward self, others, and school, and to improve their abilities to express themselves in non-verbal areas. The art consultant had an accompanying objective which was to have pupils find within the area of art an appropriate avenue of expression and gain a better self-concept.

Various structural projects were introduced using materials and various media that would be new to the students or could be used in a way that would be different to them. One of the most successful projects was that of colored tissue painting on white cardboard. The art consultant believed that the project completion was not as rapid as expected, however, pupils in this classroom were also involved in some regular classroom work and scheduling conflicts arose which prevented set times for which art work could be completed. Success in art work from this group could be described by saying that three art pieces won a place in the Regional National Scholastic Art contest held in Wichita during the year. Two of these were sent to New York City and won honorable mention awards.

The consultant in physical education worked with some members of this class. The objectives for this group were to present activities which could be used in leisure time and to phase the pupils into the regular physical education program. Pupils who were unable to participate in regular physical education classes were presented such games as Four Square and Hop Scotch to work on skills of balance, hopping, and striking. The balance beam and balance board were introduced to all of the students to aid in the development of coordination, balance, and perceptual ability. It is extremely difficult to determine results for this group since the consultant worked directly with only four of the pupils. The consultant did get results for some tests. The American Association of Health, Physical Education, and Recreation Youth Fitness Test was administered in the fall and again in the spring. The means and ranges of those taking the tests are presented in Table 4.34. Individual scores for those tested are shown in Table 15, Appendix B.

TABLE 4.34

RESULTS OF AAHPER YOUTH FITNESS TEST FOR
LEARNING DISABILITIES CLASS - JUNIOR HIGH LEVEL

Measures	Fall Test	Spring Test	Gain
Pull-ups (number)			
Mean	3.7	1.6	-2.1
Range	0 - 12	0 - 5	0 - 0
Sit-ups (number)			
Mean	34.9	53.0	18.1
Range	2 - 63	20 - 90	12 - 45
Shuttle Run (seconds)			
Mean	11.2	11.2	0
Range	12.4 - 9.9	12.6 - 9.2	+.3 - -1.5
Standing Broad Jump (inches)			
Mean	50.8	61.0	10.2
Range	25 - 72	47 - 80	-12 - 42
50-Yard Dash (seconds)			
Mean	8.6	8.4	.2
Range	9.9 - 7.5	9.5 - 7.2	+.2 - -.8
Softball Throw (feet)			
Mean	77.2	84.4	7.2
Range	32 - 140	23 - 152	-9 -22
600-Yard Run-Walk (minutes)			
Mean	2.53	2.58	-.05
Range	2.97 - 2.08	3.50 - 1.93	+.25 - -.34

In addition to other objectives stated earlier, the music consultant's objectives for this group included presenting materials and activities which could be used in leisure time at home and school and phasing pupils into regular music classes.

Various instruments, such as guitars, ukuleles, maracas, bongos, claves, and a guiro were placed in the room. The proper way to hold and play the various instruments was demonstrated. Each pupil worked on them individually on occasion.

Six of the ten pupils were enrolled in regular music classes ranging from music appreciation to band and mixed chorus. The consultant believed that under the circumstances of pupils moving in and out of the room at various times during the day no evaluation of progress could be made.

One pupil was selected from each classroom for further investigation. The selection was not made on a random basis but as a result of a joint effort between the Center staff, the classroom teacher, and members of the Research Division. The pupil selected from each classroom was not primarily representative of the type of pupil placed in that specific classroom, but it was the intent to make the case study pupils representative of the types of handicaps within the supplementary classroom program. The following is the summary for the pupil selected from the Learning Disabilities, Junior High Level classroom.

CASE STUDY SUMMARY

Background Information

Family Information

The subject was a male Caucasian born in September, 1954. He had two older siblings, one male and one female. The family resided in a middle-class neighborhood. The father, previous to a heart attack, was a customer service manager for a large department store. After his heart attack, he operated a television and appliance repair establishment. The mother was a housewife.

Health History

The subject received good medical care from the family physician during his young years. As an infant, he did not crawl. At the age of nine months he contracted chicken pox and measles.

In August, 1965, the subject was examined by a neurologist. Seizures and problems in learning were precipitating factors for the examination. The neurologist suggested the possibility of minor organic damage. The electroencephalogram showed an abnormal tracing with paroxysmal cerebral dysrhythmia, unlocalized type. He placed the subject on some anti-convulsive drugs to control the seizures. Three weeks later the subject was free from seizures and appeared more cooperative and better able to concentrate.

4.74

School Adjustment and Achievement

The subject attended one school previous to the initiation of the referral. He was retained in Kindergarten due to immaturity (failure to conform). In the 3rd and 4th grades he conformed quite well. In many instances he would attempt to do something academically, succeed to a point one day, and the next day did nothing. He did not seem to be doing this intentionally. He did excel on the playground, and the other children looked to him for leadership here. However, this has diminished since that time. During the 6th grade, the teacher noted a change in his behavior. He was overly dependent, engaged in frequent daydreaming, and was often late to school. He began to "talk back" to adults.

A battery of tests given at the school in 1960 and 1965 showed that the subject had normal intelligence. The school psychologist making the referral to the Diagnostic Center believed that the subject's behavior was beginning to resemble that of an emotionally disturbed child.

Referral, Evaluation, Recommendations and Placement

Referral

In September, 1966, a referral form for the subject was processed by the Center. Consideration for placement in a classroom for children with learning disabilities was requested. Center personnel including a staff school psychologist and staff social worker were assigned to the case.

Evaluation

With parental permission, the staff school psychologist requested and obtained medical reports from the neurologist who had seen the subject in 1965. As reported in the Health History section of this summary, the neurologist reported the possibility of minor organic damage and placed the subject on some anti-convulsive medication. He also stated that the subject might be considered for a learning disabilities program. He believed that the subject would be more receptive to learning as a result of the medication.

Since psychological testing had been done just prior to the initiation of the referral by the sending school, testing was not repeated by the staff school psychologist. Results of the Wechsler Intelligence Scale for Children consisted of a verbal I. Q. of 92, a performance I. Q. of 97 and a full scale I. Q. of 94. The test administrator indicated a scatter among subtest scores.

Prior to the staffing, the staff school psychologist visited with the family and observed the subject on the playground and in the classroom. The subject appeared withdrawn, noncommunicative, and had no satisfactory peer relationships. The parents had cooperated little with the school until just prior to the time the referral was made.

Recommendations and Placement

The Diagnostic and Evaluative Admissions Committee of the Center had a staffing during October, 1966. Information was presented by personnel of the sending school. Center staff members who had had direct contact with the subject and family shared their information and findings with the Committee. The following recommendations were made:

(1) Trial placement in the program for children with learning disabilities.

(2) Request parental approval for getting additional psychological help for the subject from a local clinical psychologist.

As a result of these recommendations the subject was placed in an elementary school classroom for children with learning disabilities at the end of November, 1966. The following month he began seeing a clinical psychologist once a week.

In May, 1967, a staffing was again held by the Diagnostic and Evaluative Admissions Committee. Reports were shared by all staff members who had been engaged in working with the subject. The teacher was rather discouraged over the subject's lack of progress, but reported that she had recorded some improvement toward the end of the year. Initially he was negative and seemed heavily sedated. Music, art, and physical education consultants reported the subject as generally appearing bored. However, he did gradually appear to like art, and began to show potential in the areas of basketball and track. Poor coordination was noted by all three consultants.

It was recommended, because of size and age, that the subject be placed in a junior high classroom for children with learning disabilities for the 1967-68 school year. The remaining information reported in this summary deals primarily with what occurred during the 1967-68 school year.

Objectives, Procedures and Results

Objectives

An attempt was made to develop basic learning skills.

Procedures

Instruction was given both individually and/or in a group. "Offices" or study carrels were available to help eliminate extraneous stimuli. Generally not more than ten pupils were present in the room as most students attended several regular classes.

The Merrill Linguistic Reader, Merrill Linguistic Skills Workbook (Merrill Publishing Co.) and the Language Master (Bell and Howell) were used to develop basic skills in reading and spelling. In the area of arithmetic, the Greater Cleveland Mathematics Program was used.

In all learning areas the subject presented the same pattern. One day he would appear to know the material presented, however, the next day he would not, and the same material had to be presented again. This pattern was especially evident when a weekend had elapsed. However, the subject worked very hard, seeming to realize that there was a definite relationship between studying and learning, and eventually being placed in a regular classroom. He apparently understood what he was to do but was very easily distracted and found it hard to concentrate.

The subject attended two regular classes during the week, art and gym. When written tests were given in gym he would fail because he could not read them. However, when the teacher read the questions to him he reportedly did very well.

Though the subject appeared to make some academic progress during the year, his length of retention was questioned. Wide Range Achievement Tests administered in the fall and in the spring yielded the following scores:

Reading	Spelling	Arithmetic
Fall - 1.7	Fall - 2.2	Fall - 3.4
Spring - 1.3	Spring - 2.6	Spring - 3.9

Center staff consultants in art and physical education worked with the subject regularly. The resource consultant provided materials for the classroom and demonstrated their use to the teacher. Due to schedule conflicts, the music consultant saw the subject rarely.

The art consultant reported the subject did very well in her area and was very original. She believed that he would benefit a great deal from a woodworking class.

In physical education, the subject did quite well, making consistent growth and passing the Kraus-Weber Test when it was administered in the fall and in the spring. Results of the AAHPER Test in the fall and in the spring can be seen in the following table:

TABLE 4.35

AAHPER FALL AND SPRING SCORES
CASE STUDY PUPIL - LEARNING DISABILITIES, JUNIOR HIGH

Measures	Fall	Spring
Pull-ups (number)	5	5
Sit-ups (number)	45	90
Shuttle Run (seconds)	9.9	9.8
Standing Broad Jump (inches)	72	80
50-Yard Dash (seconds)	7.5	7.2
Softball Throw (feet)	140	152
600-Yard Run-Walk (minutes)	2.1	2.0

A staffing was held in May, 1968 and all personnel who had worked with the subject shared their findings. It was agreed that the subject was a boy who would need excessive help and support for a long time with eventual sheltered placement not a remote possibility. It was also suggested by the staff school psychologist that the school begin to emphasize vocational training for the subject.

Since the subject resided in a outlying district and that district was forming a junior high classroom for children with learning disabilities, it was recommended that the subject be placed in that classroom for the 1968-69 school year. If that was not possible, it was recommended that the subject remain in the Title III classroom for children with learning disabilities for the 1968-69 school year.

4.80

HEARING HANDICAPPED, PRE-SCHOOL

A supplementary classroom was provided for children of pre-school age with hearing difficulties. Two groups of pupils were served on a half-day schedule. One group consisted primarily of pupils three and four years of age, and the other group was primarily kindergarten or five years of age. These pupils had hearing impairments severe enough that communication and language skills could not be learned adequately without specialized equipment and instructional materials.

OBJECTIVES

(1) To enable pupils with hearing handicaps to observe, attend, imitate, concentrate, remember, and reason through the use of the senses.

(2) To help each pupil make use of any residual hearing he may have in discriminating sounds.

(3) To improve the skill of lipreading.

(4) To improve the ability of each pupil to communicate with language and to respond to the communication of others.

(5) To help develop speech and vocabulary.

(6) To improve personal and social adjustment so that pupils are able to function satisfactorily in group learning and other sound situations.

(7) To discover and devise effective techniques and superior instructional materials for pupils with hearing handicaps.

METHODS AND PROCEDURES

A maximum class load of seven pupils was maintained in the afternoon group. One pupil in the morning group moved away but returned in three months, making the class load eight in that group the last month of the school year. Pupils of kindergarten age are not usually phased into a regular classroom program until much later in their school careers. Pupils are removed from the class only when they move to another city or leave the program to attend state or privately operated schools for deaf children.

A qualified classroom teacher was utilized to guide classroom activities. A part-time teacher aide enabled her to provide individualized instruction periods. Supportive services in art, music, and physical education were provided on a scheduled weekly basis by the consultants in those areas.

Sense training, including visual, tactile, and auditory, was the major emphasis of experiences provided for these pupils. Speech development and communication skills are desirable outcomes of this training. Flexibility in classroom situations encouraged the development of socialization.

PUPILS PLACED IN CLASSROOM

Examination of pupil records maintained by the teacher and other school personnel revealed the following information about the pupils:

Age range at entrance: 3 years, 0 months to 6 years, 1 month

Race: Ten Caucasian, two Negro, two Spanish-American

Sex: Six male - eight female

A total of fifteen pupils was placed in the classroom. One pupil was assigned on a half-day basis to this classroom but was officially counted with the primary level group. Nine pupils were placed at the beginning of the school year, two were added in November, two more in December, one in January, and one in March. One pupil in the morning class moved out of the state near the end of September and returned in January. Other pupils had already been staffed into the classroom; therefore a total of eight pupils was enrolled during the second semester in the morning group. The afternoon group was maintained with a maximum of seven pupils.

Attendance records show that while assigned to the special classroom the pupils' attendance varied from a low of seventy-four percent to a high of one hundred percent. The average attendance for those enrolled was ninety-one percent.

PUPIL RESULTS

Few standardized tests are available for use with hearing handicapped children of this age. The Hiskey - Nebraska Test of Learning Aptitude was administered to most children in this group. It was believed that this would not be a particularly advantageous test to use as a pretest, posttest instrument given to each child twice a year.

The decision was made to have this test administered at least once a year to each child so that the testing dates would fall approximately one year apart. A summary of results for those taking the test this year is presented in Table 4.36.

TABLE 4.36

RESULTS OF THE HISKEY - NEBRASKA LEARNING APTITUDE TEST - HEARING HANDICAPPED, PRE-SCHOOL

N = 11	Learning Age	Deviation I. Q.
Mean	4 - 6	99.3
Standard Deviation	1 - 1	16.6
Range	3 - 0 to 6 - 6	70 to 134

A nontest source of evaluation data was a rating scale which was developed during the first year of operation by members of the Research Division and the teacher. This scale was then revised during the second year. The rating scale and accompanying guide is based on curriculum items for the class. Copies of the rating scale and the guide are found in Appendix A. The teacher was asked to rate each child on those items that apply in November and again in May. A summary of results for the group on both ratings is presented in Table 4.37.

TABLE 4.37

RATINGS BY TEACHER OF PRE-SCHOOL
HEARING HANDICAPPED PUPILS

	Mean Scores	
Item Rated	Nov.	May
I. SENSE TRAINING		
A. Auditory	2.1	2.5
B. Visual	3.2	3.0
C. Tactile	3.2	2.8
II. SOCIALIZATION	2.6	3.0
III. RESPONSIBILITY	2.5	3.0
IV. BASIC LEARNING SKILLS		
A. Manipulative Development	3.7	3.8
B. Matching	2.9	2.9
C. Vocal Skills	1.6	2.2
D. Reading	2.0	2.2
E. Reading Materials	1.1	1.7
F. Writing Readiness	1.5	3.3
G. Arithmetic Concepts	1.4	3.2
H. Arithmetic Operations	0.2	0.2
I. Arithmetic Materials	1.1	2.2
J. Lipreading and Speech Vocabulary	1.4	1.7
V. LANGUAGE DEVELOPMENT THROUGH SPEECH ELEMENTS		
A. Speech Elements	2.3	4.0
B. Speech Sounds	3.7	3.6
VI. LANGUAGE DEVELOPMENT THROUGH CONCEPTS	Number	
	Nov.	May
A. Language Concepts	3	6

Rating scores given on this device were on a five point scale. The teacher was instructed to rate only the items applicable and to give no rating if that item did not apply to the individual. The subheadings listed in Table 4.37 indicate only the major categories for ratings. Mean scores were computed by subheadings for the group in both November and May. The intent of the design of the rating scale was to include items contained in the curriculum from the age three level to the age eight level.

Of the eighteen subheadings listed on the rating scale, mean scores for the group increased on thirteen of the subheadings, decreased on three, and remained the same on two. Individual growth is not reflected in the table; however, based on increases in mean, scores indicate some progress in most areas.

As in the other classrooms, the teacher was asked to rate the growth or progress observed in attitude changes and certain types of improvement in skills. Since this was a pre-school group, ratings in academic areas were not applicable. The frequency of ratings in positive changes in attitude and progress in skills is given in Table 4.38.

TABLE 4.38

FREQUENCY OF TEACHER RATINGS OF POSITIVE CHANGES IN ATTITUDES AND GROWTH OR PROGRESS IN SKILLS - PRE-SCHOOL, HEARING HANDICAPPED

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
2. Positive change in attitude toward:				
a. Self	9	3	1	2
b. School	10	1	2	2
c. Others	8	2	4	1
3. Growth or progress in the following:				
a. Study skills	6	4	1	4
b. Physical skills	3	6	3	3
c. Musical skills	1	8	4	2
d. Artistic skills	6	6	2	1

Table 4.38 shows that, on the average, about seventy percent of the class exhibited moderate or much growth in the areas indicated, according to teacher ratings. It is very difficult to obtain measures of progress or growth for hearing handicapped children in this age group from standardized devices. Information obtained from anecdotal records support findings on the rating scale results and ratings given on attitude changes and growth in skill areas.

CLASSROOM SUPPORTIVE SERVICES

In addition to objectives stated earlier, the art consultant also had as an objective for this class the presentation of a multi-media approach to enable the pupils to experiment and develop various skills in the art area. To accomplish this objective, projects were proposed including the following types of media: crayons, tempra, finger paint, water color, felt markers, water base painting ink, clay, cardboard, glue, scrap fabric, textures, yarn, and colored construction paper. In addition to individual projects, cooperative efforts were involved in painted and cut or torn paper murals at various times during the year.

The art consultant assessed the growth or progress by saying: "All children grew in their development in varying degrees, this degree being due in part to maturation, previous acquaintance with materials, length of time in the program, and mental ability."

Music activities, based on programs suggested by the music consultant, were developed in accordance with the objectives of establishing basic discriminations between sounds and basic responses to music. To develop discrimination between "on" and "off" a record player was placed in full view of the children. The needle was placed on the record, the teacher said, "It's on," and respond by clapping her hands in time to the music. The pupils followed her action. Pupils were placed in gradually longer distances from the record player and finally in a position where they could not see it. "Off" was handled in the same manner, however, the teacher ceased clapping when the music was off. Discrimination between "on" and "off" was measured by whether the children independently emitted a clapping response when the music was on or ceased to clap when the music went off.

The consultant reported that all children except one were able to respond correctly according to the procedures used. Observations also indicated that when a specific activity was suspended for a period of a few days all children did not respond correctly when it was resumed.

The music consultant also conducted an experiment in the assessment of sound intensity preference using several members of this group. Results of the experiment are presented in Appendix C.

Objectives for this group developed by the consultant in physical education included establishing a liking for physical activities and developing balance, coordination, motor perception, rhythm, identification of body parts, flexibility, and strength.

In order to accomplish these objectives, a planned daily program of physical activities was utilized. The physical education period, approximately twelve to fifteen minutes in length, was divided into a three to five-minute warm-up period and a period presenting gross motor activities. Nearly all the games presented required the children to crawl, walk, gallop, skip, jump, or run.

A modified version of the AAHPER Youth Fitness Test was utilized as a measure of physical ability with this group. Difficulty in communication with the children and the fact that the consultant was able to serve directly only the morning group limit the results available. The scores for those tested are presented in Table 16, Appendix B.

As indicated earlier, all pupils except one remained in the special classroom from the time they entered until the close of the school year.

This pupil moved out of state for a three month period and reentered upon return. According to the end of the year staffing reports, twelve of the pupils from the group were to remain in the appropriate level for hearing handicapped children under Title III jurisdiction. One pupil was recommended for placement in the locally supported hearing handicapped room, and one was recommended to be phased partially into a regular classroom program with speech and language development a major function of the special room.

One pupil was selected from each classroom for further investigation. The selection was not made on a random basis but as a result of a joint effort between the Center staff, the classroom teacher, and members of the Research Division. The pupil selected from each classroom was not primarily representative of the type of pupil placed in that specific classroom, but it was the intent to make the case study pupils representative of the types of handicaps within the supplementary classroom program. The following summaries are for the pupils selected in the Pre-School Hearing Handicapped groups.

CASE STUDY SUMMARY

Background Information

Family Information

The subject was a female Caucasian, born in January, 1965. She had two older siblings, both female. The family resided in a middle-class neighborhood. The father had completed three years of college, the mother one. The father was employed as an analyst for a corporation located approximately forty miles from his residence. The mother was a housewife. The family moved to this city so that the subject could have appropriate educational opportunities.

Health History

The subject's mother contracted the measles when she was two and one-half months pregnant. At the time of birth she was one week overdue. The delivery was forced but then progressed too rapidly. A great deal of hemorrhaging occurred. The subject was pronounced normal.

At the age of eighteen months the subject was diagnosed as having a hearing loss. The diagnosis was made by a medical doctor. Further evaluation at an area medical center indicated a bilateral 90 decibel sensorineural hearing loss.

The subject walked at eight months and started saying one word, "mama," at two years of age. She had chicken-pox and mumps. No other serious illness was noted.

School Adjustment and Achievement

Since the subject was of pre-school age, no school records were available.

Referral, Evaluation, Recommendation and Placement

Referral

During August, 1967, a referral form for the subject was processed by the Center. A diagnostic evaluation was recommended and consideration for placement on the waiting list of the pre-school classroom for hard-of-hearing children was requested. The subject was not old enough for placement when the referral was received. Center personnel, including a staff school psychologist and staff social worker were assigned to the case. Medical reports were requested from agencies who had previously evaluated the subject. The subject was referred by the Center to an ear specialist for a current examination.

Evaluation

Psychological testing by the staff school psychologist revealed a D. I. Q. of 91 as measured by the Hiskey-Nebraska Learning Aptitude Test. The subject would not proceed with each task until she was very sure of what she was doing. Her language age was equivalent to her chronological age. It was felt she needed a great deal of socialization.

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The ear examination confirmed results of those examinations previously conducted by other agencies. No other physical anomalies were noted.

A social history taken by the staff social worker revealed that the parents had placed the subject's name on the waiting list for placement in a residential school for the deaf when she became old enough to attend.

Recommendations and Placement

The Diagnostic and Evaluative Admissions Committee of the Center had a staffing. The Center staff members who had had direct contact with the subject and family shared their findings and information with the committee. The following recommendations were made:

(1) Place on the waiting list of the pre-school classroom for hard-of-hearing children until she is old enough for trial placement.

(2) Regular evaluations should be conducted by an ear specialist and audiologist.

(3) The staff social worker should continue contacts with the parents.

As a result of the recommendations, the subject was placed in the pre-school classroom for hard-of-hearing children in January, 1968.

Objectives, Procedures and Results

Objectives

Attempts were made to provide sense training, to develop appropriate socialization and responsibility, and to develop language and basic learning skills.

Procedures and Results

Instruction was given individually and in a group. Repetition of all activities occurred consistently. An amplification system was used in the classroom to facilitate communication.

Various techniques were used in presenting all classroom activities. In speech, feathers, bubbles, balloons and candles were used in blowing exercises (wh, p, ar). This was done by imitation. The activity was gradually expanded to include recognition of these sounds in the printed form, and matching the forms to other printed forms. An alphabet of plastic letters from a kit produced by the Open Court Publishing Company was used for this.

In auditory training, blocks were dropped into a can by the subject when she heard a drum, bell, or cricket. Also, a teletrainer obtained from the local telephone company was used to feel and respond to vibration.

In order to evaluate progress, a rating scale was devised listing all educational and social activities presented during the year. Pupils were rated on a five-point scale. Each number on the scale was given a description of observable behavior that appeared to be related to the sequential development of the skill named by that item. The number five indicated the highest level of achievement in all areas, while the number one indicated the lowest level of achievement. The scale was administered to each of the pupils both at the beginning and end of the school year. Mean scores for each category of educational and social activity presented were obtained. Since the subject was not enrolled until January of the 1967-68 school year, she was rated only once in May. The following table, therefore, gives only the mean post rating scores of the morning group and the mean post rating scores of the subject. These group means are different from the total pre-school results presented earlier.

TABLE 4.39

MEAN RATING SCORES OBTAINED ON RATING SCALE - CASE STUDY PUPIL - HEARING HANDICAPPED, PRE-SCHOOL

Item Rated	Group	Case Subject
Auditory Training	1.7	1.8
Visual Training	2.5	3.4
Tactile Training	2.5	3.4
Socialization	2.4	2.9
Responsibility	2.7	3.8
Manipulative Development	3.2	2.5
Matching	1.6	3.7*
Vocal Skills	1.4	4.0*
Reading	1.9	1.0
Reading Materials	1.0	1.0
Writing Readiness	1.4	1.0

TABLE 4.39
(continued)

Arithmetic Concepts	1.2	1.0
Arithmetic Operations	---	---
Arithmetic Materials	1.0	1.0
Lipreading and Speech	1.1	1.0
Language Development Through Speech Elements	3.4	2.0*
Speech Sounds	2.5	3.0

*Not rated on all items

It can be seen that the subject scored higher than the group in six out of fourteen categories in which all items were rated. This occurred though she had had only one-half as much school training as the rest of the group. In three categories (matching, vocal skills, and language development through speech elements), a valid comparison could not be made since the subject was rated on only a portion of the items in these categories. In the remaining eight categories she scored lower than the group. One category, arithmetic operations, was not rated for any of the pupils.

Diagnostic Center staff consultants in art, music, and physical education worked with the subject regularly. The resource consultant provided materials used in the classroom and demonstrated methods of using them to the teacher. Specific activities conducted by the consultants are described under the Classroom Supportive Services topic of this section.

The art consultant stated that "in all art expressions she seems to be honestly afraid of getting dirty." She also appeared to be very unsure of herself in most art activities. The consultant believed that the subject had had no opportunity to do art work at home and that this was necessary before much progress could be observed.

The music consultant reported the subject as being a cooperative, neat-appearing little girl. Her attention span was generally very short but increased in activities which were strictly imitative. In these types of activities her responses were usually correct. The subject participated in a study conducted by the consultant to determine what decibel level of music she preferred. Procedures and results of that study can be seen in Appendix C, the subject in point being labeled as Subject C.

In physical education activities a fear of getting dirty was observed by the consultant. This seemed to hinder her participation. A modified Kraus-Weber Test for Minimal Muscular Fitness was administered in the winter and in the spring (See Part 5 for description of modification). A growth of 1.4 to 2.4 was seen in the spring, the greatest growth being in the upper back region.

A staffing held in May, 1968 revealed that all staff members agreed that the subject had made consistant growth during the period she was in the classroom. Though she was enrolled for only a short time, results indicated that she could, with little doubt, progress favorably in a special education setting. It was recommended that she be enrolled in the classroom for hearing handicapped pupils for the 1968-69 school year.

It was also recommended that regular contacts with the parents by the social worker be made to acquaint them with some of the subject's needs, in order to prevent a pattern of overprotectiveness.

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CASE STUDY SUMMARY

Background Information

Family History

The subject was a female Caucasian born in October, 1962. She had three siblings, one older brother and two younger sisters. One of the female siblings was multihandicapped. The family resided in a middle-class neighborhood. The father was employed by a television service. The mother was a housewife.

Health History

The subject had a normal birth and weighed eight pounds. The parents reported that they had no awareness of the subject's handicap until she was two years of age.

Testing at an area medical center revealed a hearing loss in the right ear and possibly little or no hearing in the left ear. A tonsil and adenoid surgery and myringotomy was indicated. The physician believed that the basic hearing loss was profound enough to warrant a hearing aid in order to permit rehabilitation.

School Adjustment and Achievement

No previous school records were available as the child was preschool age.

Referral, Evaluation, Recommendations and Placement

Referral

During September, 1966, a referral form for the subject was processed by the Center. Because medical reports from several doctors stated that the subject had a hearing loss, consideration for placement in a classroom for hearing handicapped pupils was requested. In addition, further evaluation by the Center staff including a psychological and social work-up was recommended. The subject was also referred by the Center to an ear specialist for further evaluation.

Evaluation

An ear examination was conducted and revealed the need for a tonsil and adenoid surgery and myringotomy. This was performed successfully. A hearing aid was necessary and was paid for by the Center.

A psychological evaluation was given by the staff school psychologist at the Center. It was believed that the subject exhibited an overall picture of having at least average intellectual ability. Linguistic output was nonexistent.

Recommendations and Placement

Information was shared by Center staff members who were directly involved in the case. A formal Diagnostic and Evaluative Admissions Committee had not yet been formed as 1966 was the first year of the program. The following recommendations were made:

(1) Trial placement in the pre-school class for hearing handicapped children.

(2) Continued medical supervision.

(3) Continued contact with the parents by the staff social worker assigned to the case.

As a result of the recommendations the subject was placed in the pre-school classroom for hearing handicapped pupils for the 1966-67 school year. A staffing held at the end of the year resulted in a recommendation that the subject be placed in a kindergarten classroom for hearing handicapped pupils during the 1967-68 school year. The remainder of this summary will be primarily concerned with what occurred during the 1967-68 school year.

Objectives, Procedures and Results

Objectives

Attempts were made to provide sense training, to develop appropriate socialization and responsibility, and to develop language and basic learning skills.

Procedures and Results

Instructions were given individually and/or in a group. Repetition of previously presented material was done consistently. The room was furnished with an amplification system to faciliate communication. A hearing aid was worn by the subject.

A rating scale was devised which listed all educational and social activities presented in the classroom during the year. Pupils were rated on a five-point scale. Each number on the scale was given a description of observable behavior that appeared to be related to the sequential development of the skill named by that item. The number five indicated the highest level of achievement in a specific area, while the number one indicated the lowest level of achievement in that area. Each pupil was rated on the items of the scale both at the beginning and end of the school year. Mean scores for each category of social and educational activity were computed. The following table gives the mean November and May scores of the afternoon group as compared to the mean November and May scores of the subject being discussed. These November and May scores are different from the total group pre and post scores presented earlier.

TABLE 4.40

MEAN PRE AND POST SCORES OBTAINED ON RATING SCALE - CASE STUDY PUPIL - HEARING HANDICAPPED, PRE-SCHOOL

	Group		Case Subject	
Item Rated	Nov.	May	Nov.	May
Auditory Training	2.8	3.2	3.5	3.1
Visual Training	3.6	3.6	4.9	5.0
Tactile Training	3.7	3.0	4.9	5.0
Socialization	3.1	3.5	4.3	4.7
Responsibility	2.8	3.3	3.8	4.0
Manipulative Development	4.0	4.3	4.5	4.4

TABLE 4.40
(continued)

Matching	2.7	4.0	3.3	3.7
Vocal Skills	1.9	2.9	3.0	3.0
Reading	2.0	2.4	3.0	3.0
Reading Materials	1.2	1.4	1.0	1.5
Writing Readiness	2.6	4.7	3.0	4.6
Arithmetic Concepts	1.5	4.7	2.9	4.5
Arithmetic Operations	0.2	---	1.0	---
Arithmetic Materials	1.1	2.1	1.5	2.5
Lipreading and Speech Vocabulary	1.8	2.2	1.9	2.5
Language Development Through Speech Elements	2.2	4.2	4.8	5.0
Speech Sounds	4.2	4.7	5.0	5.0

It can be seen that in twelve out of seventeen categories the subject produced a higher score from November to May. In two categories she maintained the same score, and in two categories her score was lower at the time of the May rating than it had been at the time of the November rating. In sixteen out of seventeen categories the subject scored higher than the group on the November rating, and in twelve out of sixteen categories she scored higher than the group on the May rating. One category, arithmetic operations, was not rated in the spring.

The Center staff school psychologist who worked with and observed the subject at various times throughout the year stated, "One of the most successful growth (academic and social) patterns I have seen among the hard-of-hearing group."

Some of the teacher's comments included: "_____'s vocabulary is growing by leaps and bounds;" "In socialization _____ has made exceptional growth;" "_____'s voice quality is very good."

Center staff consultants for art and music saw the subject on a regular basis; however, the physical education consultant was unable to do so because of schedule conflicts. The resource consultant provided various materials for the classroom and demonstrated their use to the teacher. Specific activities conducted by the consultants are described under the Classroom Supportive Services topic of this section.

The art consultant reported growth during the year in spatial relationships and in color awareness. Movement through all developmental stages was considered to be rapid. It was believed that there was room for improvement in the area of body awareness. The art consultant saw the subject as a "very alert child."

The music consultant saw the subject daily during the second semester. An attempt was made to determine what decibel level of music the subject preferred (See Appendix C for details concerning this procedure). It was found that the subject definitely preferred music at the 90 decibel level of intensity. The data also suggested that she was discriminating between music played at 80 decibels and that played at 70 and 60 decibels, however,this was not conclusive. No significant difference in listening behavior was observed when the left and right ears were evaluated individually.

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It would seem apparent from the data obtained from the rating scale and those comments made by personnel directly involved in working with the subject, that the class placement and teaching techniques used within the class were appropriate and successful in facilitating the educational and social progress of the child. In May, 1968, it was recommended that the subject be placed in the Primary I classroom for pupils with hearing handicaps.

HEARING HANDICAPPED - PRIMARY LEVEL

One supplementary classroom was provided for pupils with hearing difficulties of the primary grade level, ages six through nine years. These pupils had hearing impairments severe enough that communication and language skills could not be learned adequately without specialized equipment and instructional materials.

OBJECTIVES

1. To enable pupils with hearing handicaps to observe, attend, imitate, concentrate, remember, and reason through the use of the senses.
2. To help each pupil make use of any residual hearing he may have in discriminating sounds.
3. To improve the skill of lipreading.
4. To improve the ability of each pupil to communicate with language and to respond to the communication of others.
5. To help develop speech and vocabulary.
6. To improve personal and social adjustment so that pupils are able to function satisfactorily in group learning and other social situations.
7. To discover and devise effective techniques and superior instructional materials for pupils with hearing handicaps.

METHODS AND PROCEDURES

A qualified classroom teacher was employed to guide the activities of the classroom. A maximum class load of six pupils was maintained throughout the year. Pupils are removed from the class only when they leave the city or the program to attend other programs available at the local or state level or privately operated schools for deaf.

A part time teacher aide helped enable the teacher to provide instruction on an individual basis. Supportive services in art, music, and physical education were provided by the consultants on a regular basis.

Sense training including visual, tactile, and auditory was the major emphasis of experiences provided for these pupils. Speech development and communication skills are desirable outcomes of this training. Flexibility in classroom situations encouraged the development of socialization.

PUPILS PLACED IN CLASSROOM

Examination of pupil records maintained by the teacher and other school personnel revealed the following information about the pupils:

Age range at entrance: 6 years, 3 months to 8 years, 7 months
Race: All Caucasian
Sex: Five male - one female

A total of six pupils were placed in the classroom; four were assigned at the beginning of school, one was added two weeks later, and the last one was added two months later. One pupil, counted in this group, also participated in activities in the pre-school group.

Attendance records show that while attending the special class the attendance for these pupils varied from a low of eighty-nine percent to a high of one hundred percent. The average rate of attendance for the six pupils was ninety-five percent.

PUPIL RESULTS

Few standardized tests are available for use with hearing handicapped children. The Hiskey - Nebraska Test of Learning Aptitude was administered to most of the pupils in this class. It was felt that this instrument was not appropriate for usage as a pretest, posttest measure less than one year apart. A summary of results for those taking the test is given in Table 4.41.

TABLE 4.41

RESULTS OF THE HISKEY - NEBRASKA LEARNING APTITUDE TEST - HEARING HANDICAPPED, PRIMARY LEVEL

	Learning Age	Deviation I.Q.
N = 6		
Mean	7-2	94.0
Standard Deviation	1-5	20.6
Range	4-0 to 8-3	58 to 122

One non-test source of data for evaluation was obtained by use of a rating scale which was developed by members of the Research Division and the teacher during the first year of operation. The rating scale was revised during the second year of operation. The rating scale and accompanying guide are based on curriculum items for the class. Copies of the rating scale and guide are found in Appendix A. The teacher was asked to rate each pupil, on those items that apply, in November and again in May. A summary of results for this class is given, for both ratings, in Table 4.42.

TABLE 4.42

RATINGS BY TEACHER OF PRIMARY LEVEL HEARING HANDICAPPED PUPILS

Item Rated	Mean Scores Nov.	Mean Scores May
I. SENSE TRAINING	N=5	N=6
A. Auditory	4.6	4.2
B. Visual	3.7	3.8
C. Tactile	3.9	3.8
II. SOCIALIZATION	3.3	3.6
III. RESPONSIBILITY	3.7	3.8
IV. BASIC LEARNING SKILLS		
A. Manipulative Development	4.5	4.3
B. Matching	4.4	4.5
C. Vocal Skills	3.3	2.6
D. Reading	3.8	4.8
E. Reading Materials	3.9	4.2
F. Writing Readiness	4.1	4.2
G. Arithmetic Concepts	4.7	4.2
H. Arithmetic Operations	1.8	2.8
I. Arithmetic Materials	3.8	3.9
J. Lipreading and Speech	4.2	4.0
V. LANGUAGE DEVELOPMENT THROUGH SPEECH ELEMENTS		
A. Speech Elements	4.0	4.2
B. Speech Sounds	4.9	5.0
VI. LANGUAGE DEVELOPMENT THROUGH CONCEPTS	Number Nov.	Number May
A. Language Concepts	10	14

Rating scores given on this device were on a five point scale. The teacher was instructed to rate only the items applicable and give no rating if that item did not apply to the individual. The subheadings listed in the table indicate only the major categories for the ratings. Mean scores were computed by subheading for the group for both November and May scores. The intent of the design of the rating scale was to include items contained in the curriculum from the age three level to age eight level.

Of the eighteen subheadings listed on the rating scale, mean scores for the group increased on twelve of the subheadings and decreased on six. Individual growths are not reflected in the table; however, based on increases in mean scores, some progress has been made in most areas.

As in the other classrooms, the teacher was asked to rate the growth or progress observed in the attitudinal changes and certain types of improvement in skills. The frequency of ratings of growth in academic and other skills and positive changes in attitude are given in Table 4.43.

TABLE 4.43

FREQUENCY OF RATINGS OF POSITIVE CHANGES IN ATTITUDE AND GROWTH OR PROGRESS IN SKILLS HEARING HANDICAPPED - PRIMARY LEVEL

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
N = 6	Much	Moderate	Slight	Little or None
1. Rate the growth in:				
a. Reading	4	0	1	1
b. Spelling	0	0	4	2
c. Arithmetic	4	1	0	1
2. Positive change in attitude toward:				
a. Self	4	1	0	1
b. School	4	1	0	1
c. Others	3	2	0	1
3. Growth or progress in the following:				
a. Study skills	3	2	0	1
b. Physical skills	2	2	0	2
c. Musical skills	3	1	1	1
d. Artistic skills	1	3	1	1

As indicated in Table 4.43, most pupils were rated as making moderate to much progress or growth in all but one of the designated areas. The fact that the spelling area was rated lower by the teacher might be attributed to the type of curriculum used with these pupils. It is difficult to assess the growth or progress as measured by standardized devices with hearing handicapped children. Information obtained from anecdotal records support findings on the rating scale.

CLASSROOM SUPPORTIVE SERVICES

Additional objectives were formulated by the art consultant for this group. Included in these objectives were to provide a working experience with various primary art materials, to provide opportunities for the development of eye - hand coordination and tactile awareness, and to use art as a way to communicate and express himself.

Painting, cut and torn paper murals completed by groups, creating and making puzzles with tactile materials, and working with various mixed media were used as means to attempt to fulfill the above objectives. The art consultant reported that "the projects completed were successful in expression and in achieving some given objectives."

To develop basic discriminations in sound such as pitch and to develop and/or modify rhythmical behavior to match certain movements with certain types of music and verbal cues were among the objectives of the music consultant in working with this group.

High and low pitch discrimination was introduced using a guitar. The appropriate verbal cue was given when a string was plucked at the beginning. Later, the high and low strings were plucked in a random order five times for each pupil. Rhythm instruments were used by the group for playing along with a recorded march. Appropriate responses such as marching to march music or skipping, running, or hopping to other rhythms were demonstrated at the beginning followed by a gradual requiring of the pupil to listen and respond correctly. The music consultant reported that all pupils were able to discriminate correctly between high and low sound. They were also able to respond well to a simple one-two, one-two rhythm but could not handle a more complex rhythm. Listening behavior was modified to the extent that they learned to take cues from the record or taped music rather than verbal cues given by the teacher and/or the consultant.

The consultant for physical education had as objectives for this class the development of overall physical fitness, coordination, balance, and perceptual motor ability.

A twenty to twenty-five minute period each day was utilized for physical activities. Exercises familiar to children were used as a five to ten minute warm up period. Games and activities including skipping, hopping, galloping, walking, running, imitations of animals, and tumbling were engaged in for the remainder of the time alloted.

A modification of the AAHPER Youth Fitness Test was administered to four pupils in both the fall and spring and a fifth pupil in the spring only. The sixth pupil was unable to take the tests due to a physical handicap. The means, ranges, and gains for those taking both tests are given in Table 4.44. Individual results can be found in Table 17 in Appendix B.

TABLE 4.44

RESULTS OF AAHPER YOUTH FITNESS TEST FOR FOUR BOYS IN HEARING HANDICAPPED - PRIMARY LEVEL

Measures	Fall Test	Spring Test	Gain
Pull-ups (number)			
Mean	0	0.5	+0.5
Range	0-0	0-1	0 - 1
Sit-ups (number)			
Mean	13.5	15.7	+2.2
Range	5-21	10-27	-10 - +6
Shuttle Run (seconds)			
Mean	13.9	12.5	-1.4
Range	14.4-13.0	13.4-11.8	-.7 - -2.2
Standing Broad Jump (inches)			
Mean	34.3	44.0	+9.7
Range	27-40	39-48	8 - 12
25-Yard Dash (seconds)			
Mean	6.5	6.4	-0.1
Range	7.3-6.0	6.8-6.1	+.6 - -.9
200-Yard Run-Walk (minutes)			
Mean	1.62	1.62	0
Range	2.00-1.47	2.13-1.44	+.13 - -.08

Table 4.44 shows that gains were made in most areas on the modified fitness test. The consultant reported that he received cooperation from both pupils and teacher. Difficulty in communicating with pupils seemed to be a problem.

According to the end of the year staffing reports, two of the pupils will remain in the Title III special classroom the coming year, and the other four will be placed in the next level hearing impaired classroom sponsored by the local school district.

One pupil was selected from each classroom for further investigation. The selection was not made on a random basis but as a result of a joint effort between the center staff, the classroom teacher, and members of the Research Division. The pupil selected from each classroom was not primarily representative of the type of pupil placed in that specific classroom, but it was the intent to make the case study pupils representative of the type of handicaps within the supplementary classroom program. The following summary is for the pupil selected from the Primary Level Hearing Handicapped classroom.

CASE STUDY SUMMARY

Background Information

Family Information

The subject was a male Caucasian born in June, 1959. He had two male siblings. The family resided in a middle-class neighborhood. The father was a district manager for an automobile corporation and conducted much of his business from his home. He completed one year of college. The mother was a housewife. She appeared very insecure and appeared to have guilt feelings concerning the subject. He was an Rh baby and she had been warned in two earlier pregnancies that serious problems could arise. The parents were seemingly not consistent in, nor did they agree upon, discipline measures.

Health History

The subject was an Rh baby. He was jaundiced at birth and received five blood transfusions. He weighed six pounds and eight ounces. Pregnancy was normal, however, labor was induced through glucose in the veins two weeks before the due date. The mother was in labor two to three days. The obstetrician felt that the subject's hearing handicap was a result of the transfusions.

The subject sat at ten months and was toilet trained at fourteen months. A local pediatrician saw the subject for periodic examinations. He was anemic until thirteen months of age. The mother reported that he had asthma until he was three years old, but that a cough syrup stopped it. His inability to respond was first noticed by his mother at eleven months. When he was fifteen months old, he was evaluated at an area medical center and found to have a severe hearing loss. Also noted was his generally slow physical development and difficulty in balance and tasks involving fine motor coordination.

School Achievement and Adjustment

The subject was admitted to an area medical center pre-school for the deaf when he was four years old. He attended the school for one year. Personnel from the school reported his progress in speech and speech reading as being spasmodic. Spontaneous expressions were limited to a few words. He was considered, however, a perceptive, observant little boy who was able to reason and predict the outcome in a sequential pattern.

The family moved to this city when the subject was five years old and he was enrolled in a kindergarten class in one of the public schools. In May, 1965, a referral to the Special Education Department was initiated by personnel working with him at the school. Sending school personnel described him as "charming, affectionate and winsome, but a terrible distraction in the classroom, and a detrimental influence on his peer group." Academic output was apparently nonexistent. He spoke only three words, otherwise communicated with gestures and facial expressions. Looking at books maintained his attention longer than anything else. Ordinarily his attention span was approximately fifteen minutes. He liked routine. Failure to learn seemed due to his inability to control his behavior. It was recommended that he be placed in a classroom equipped to deal with hard-of-hearing children.

Referral, Evaluation, Recommendations and Placement

Referral

During August, 1966, the referral form for the subject was forwarded to the Diagnostic Center. Center personnel including a staff school psychologist and staff social worker were assigned to the case. Since recent reports from an area medical center were available, no medical referral was initiated at that time.

Evaluation

With parental permission, the staff school psychologist requested and obtained recent medical reports from the family pediatrician and the medical center where the subject had been seen.

Psychological testing done by the staff school psychologist revealed that the subject had an average range IQ. Low areas were visual attention and visual memory.

The social worker visited the home and obtained a social history from the family. The psychologist believed that the subject had been consistently exposed to a rather chaotic home environment and had "held together" fairly well considering this.

Recommendations and Placement

Information was shared by sending school personnel and those Center staff members who were directly involved in the case. A formal Diagnostic and Evaluative Admissions Committee had not yet been established as 1966 was the first year of the program. The case was discussed and it was recommended that the subject be placed in the preschool-kindergarten classroom for hearing handicapped children. In September, 1966, the subject was enrolled in this class. In October, 1966, he was advanced to the Primary I class for hearing handicapped children. Due to his age, maturity and academic achievements, it was believed that he would function better in this class. At the time of enrollment he had been thought too "young" for the Primary I class. At the close of the 1966-67 school year it was recommended that he again be enrolled in the Primary I class for the 1967-68 school year. The remainder of this summary will deal primarily with what occurred during the 1967-68 school year.

Objectives

Since appropriate classroom behavior was not frequently demonstrated by the subject, the major objective was to try to establish acceptable classroom behavior. The teacher felt that appropriate classroom behavior and learning ability were interdependent - that the subject would not learn until behaviors conducive to learning were established. Some other objectives included developing basic language, lipreading and learning skills.

Procedures

Instruction was given individually and/or in a group. An amplification system was installed in the classroom to facilitate communication. The subject wore a hearing aid.

Initially, teacher comments in regard to the subject's performance in learning activities and personal adjustment read: "Attention poor;" "Placed in corner most of the time;" "Behavior continues to be very bad;" "Sent home twice." Traditional measures such as standing in the corner, sending home, and/or taking away something he liked, failed to effect any change in his behavior. On February 20, 1968, a staffing was held at the Diagnostic Center. All personnel engaged in working with the subject shared reports on his progress. Behavior in all areas seemed very similar. The subject was making no progress. A suggestion was made by the staff school psychologist that the teacher should begin a consistent program of only positive reinforcement. Anything nice or appropriate was to be followed immediately with praise from the teacher. This meant that praise was to be given intermittently during the day rather than at the end of the day. Inappropriate behavior was to be ignored as much as possible as this seemed to be the subject's method for getting attention.

The teacher agreed to try using this technique, and noticed some improvement in the subject's behavior during the first week. However, his behavior fluctuated between "good" and "bad" for several weeks. At the end of one month, teacher comments began to read: "Able to participate for the most part satisfactorily;" "Seems to be improving in his ability to concentrate this week;" "He demands my attention and earns it by working in a positive way rather than by misbehavior." Three weeks later the teacher wrote, "______ has learned to conform to the rules of behavior in return for teacher praise and attention." Two weeks prior to the closing of school, the teacher reported, "_____'s whole pattern of behavior has changed. He now seems to be capable of genuine affection for the teacher. Now that he accepts praise, the greatest punishment for him is withdrawal of praise."

Progress in classroom activities was measured by a rating scale devised for hearing handicapped children in the Title III program. Children were rated on a five-point scale. Each number on the scale was given a description of observable behavior that appeared to be related to the sequential development of the skill named by that item. The number five indicated the highest level of achievement in all areas while the number one indicated the lowest level of achievement. The scale was administered to the pupils both at the beginning and end of the school year. Mean scores for each category of educational and social activity presented during the year were obtained. The following table gives the mean November rating and May rating scores of the group as compared to the mean November rating and May rating scores of the subject being discussed.

TABLE 4.45

MEAN RATING SCORES OBTAINED ON RATING
SCALE FOR CASE STUDY PUPIL
HEARING HANDICAPPED - PRIMARY LEVEL

	GROUP		CASE SUBJECT	
ITEM RATED	NOV.	MAY	NOV.	MAY
Auditory Training	4.6	4.2	4.5	3.2
Visual Training	3.7	3.8	3.9	3.3
Tactile Training	3.9	3.8	3.7	2.6
Socialization	3.3	3.6	2.1	2.7
Responsibility	3.7	3.8	2.8	3.3
Manipulative Development	4.5	4.3	5.0	5.0
Matching	4.4	4.5	4.6	4.7

TABLE 4.45
(continued)

Vocal Skills	3.3	2.6	1.9	1.3
Reading	3.8	4.8	4.0	4.0
Reading Material	3.9	4.2	3.5	3.1
Writing Readiness	4.1	4.2	5.0	4.0
Arithmetic Concepts	4.7	4.2	4.5	4.5
Arithmetic Operations	1.8	2.8	3.0	3.0
Arithmetic Materials	3.8	3.9	3.8	3.8
Lipreading and Speech Vocabulary	4.2	4.0	3.2	3.4
Language Development Through Speech Elements	4.0	4.2	3.1	3.2
Speech Sounds	4.9	5.0	4.9	5.0

It can be seen that six of the case subject's May rating scores were lower than his November rating scores, six were higher and five remained the same. However, some similarity in data can also be observed for the group. Six of the group's May rating scores were lower than their November rating scores, 11 were higher.

Staff consultants for art, music and physical education worked with the subject on a regular basis. The resource consultant provided materials for the classroom and demonstrated the use of each item to the teacher. Specific activities conducted by the consultants are described under the Classroom Supportive Services topic in this section.

The art consultant saw the subject as an independent, alert little boy. Art concept drawings and creativity were rated high; however, the consultant suspected that the subject was not as happy as he had been the previous year.

The music consultant reported the subject as liking music but not being capable of participating with the group because of inappropriate behavior. All of his musical behaviors occurred only sporadically. The consultant observed gradual improvement in the subject subsequent to the February staffing. When behaving appropriately, he executed all musical behaviors very well.

In the area of physical education the subject was reported to have made a "consistent and remarkable gain" in his physical activities. Both the AAHPER and the Kraus Weber tests were administered to the subject in the fall and spring. Both tests were modified by the consultant. Reasons for and degree of modification are explained in Section 5 of this report. Results of the tests for the case subject are given in the following tables:

TABLE 4.46

AAHPER FALL AND SPRING SCORES
CASE STUDY PUPIL - HEARING HANDICAPPED, PRIMARY LEVEL

MEASURES	FALL	SPRING
Pull-Ups (number)	0	1
Sit-Ups (number)	5	–
Shuttle Run (seconds)	14.4	12.2
Standing Broad Jump (inches)	33	45
25-Yard Dash (seconds)	6.5	6.3
Softball Throw (feet)	–	–
200-Yard Run-Walk (minutes)	2:00	2:13

TABLE 4.47

KRAUS WEBER FALL, WINTER AND SPRING SCORES
CASE STUDY PUPIL - HEARING HANDICAPPED, PRIMARY LEVEL

	TEST 1	TEST 2	TEST 3	TEST 4	TEST 5	TEST 6	TOTAL
Fall	1	.25	1	.3	.4	0	2.95
Winter	1	.5	1	1	1	1	5.50
Spring	1	1	1	.3	.7	0	4.00

The greatest improvement in the subject seemed to be in the area of personal adjustment. The teacher's comments concerning his behavior in the classroom indicated a rather drastic change had occurred. It would seem that some behavior prerequisites to learning were established. How these behaviors would maintain overtime was questioned. Since the subject had had a long, previous pattern of behavior problems, and also since his home environment seemingly promised little help, regression could probably be expected over the summer. No doubt the same techniques would need to be used again in the fall when the subject returned to school. Achieving success from good behavior and academic skills, however, could result in continued success in the school setting.

A staffing was held in May, 1968, and it was recommended that the subject be placed in the Primary II class for hearing handicapped children for the 1968-69 school year. He was advanced to the second level primarily because of his age. It was believed that he should have a second grade peer group. However, it was recommended that the teacher spend considerable time reviewing material on the first grade level.

SEVERELY ORTHOPEDICALLY HANDICAPPED
SECONDARY SCHOOL AGE

One supplementary classroom was provided for pupils having limiting orthopedic conditions. These pupils would be unable to participate in regular programs but were not severe enough to be in a homebound program or hospitalized. Some of the following conditions were possessed by pupils served by the classroom: spastic, brain damage, post spinal bifida, paraplagice, and athetoid cerebral palsy. Instruction was of necessity individualized because of the differences in the nature of the handicaps and a wide range of capabilities among the pupils.

OBJECTIVES

1. To improve communicative skills.
2. To improve basic skills in reading, mathematics, and spelling.
3. To improve personal adjustment to enable pupils to work in group situations.
4. To aid in the development of visual and motor skills to enable pupils to attain better body control.
5. To enable pupils to gain skills which will increase employability.
6. To discover and devise effective teaching techniques and superior instructional materials for severely orthopedically handicapped pupils.

METHODS AND PROCEDURES

A qualified classroom teacher, with the assistance of a teacher aide, provided an individualized program of instruction for pupils with orthopedic handicaps. Supportive programs in art, music, and physical education were provided by the consultants in those areas. Equipment, materials, games, etc., of a special nature were provided for adapting the work of individuals in the group to the regular curriculum. A variety was necessary to accomodate the wide range of age levels and abilities of the pupils in the class.

An emphasis was placed on academic skills; however, provision was made to allow individuals to pursue areas of interest. It was possible to work in group situations only in areas where socialization was a function of the activity.

A maximum class load of eight pupils was maintained due to limitations of the types of handicaps involved and the size of the available classroom to use for this type of class.

PUPILS PLACED IN CLASSROOM

Examination of pupil records maintained by the teacher and other school personnel yielded the following information about the pupils:

Age range at entrance: 13 years, 6 months to 23 years, 1 month
Race: All Caucasians
Sex: Seven male

A total of seven pupils was placed in the classroom, six at the beginning of the school year and one five months later.

Attendance information shows that while assigned to the special classroom the pupils' attendance varied from a low of eighty-eight percent to a high of one hundred percent. The mean attendance for those enrolled was ninety-six percent.

PUPIL RESULTS

The basic set of evaluative tests including the Peabody Picture Vocabulary Test (PPVT), the Wide Range Achievement Test (WRAT), and the Goodenough - Harris Drawing Test (GHDT) were administered to most pupils in this group. The results for the test are from May of the previous year to May of this year. Some pupils were unable to perform the drawing tasks due to their handicaps; therefore, results are somewhat incomplete on the GHDT.

The Peabody Picture Vocabulary Test was used as a measure of verbal ability. Only four of the seven pupils placed in this classroom had complete sets of pretest and posttest scores. Summarized results are presented in Table 4.48.

TABLE 4.48

PEABODY PICTURE VOCABULARY TEST RESULTS FOR ORTHOPEDICALLY HANDICAPPED - SECONDARY SCHOOL LEVEL

	May '67	May '68
Number	4	7
Raw Score Mean	91.3	97.1
Raw Score Median	88	98
Raw Score Range	79 - 110	83 - 112
Standard Deviation	12.0	9.1
Standard Score Mean	89.8	97.9
Standard Score Median	93	101
Standard Score Range	72 - 101	74 - 108
Standard Deviation, Standard Score	11.0	11.4

Form A of the Peabody Picture Vocabulary Test was administered in May '67 and Form B in May '68. One obvious item in the table is the different number of pupils in May '67 and May '68. The results for the four pupils who had taken both tests were nearly the same as those reported for all seven. The standard score mean for the four was 97.0 with a standard deviation of 13.5 and a median of 103.

One of the four pupils was older than the chronological age limit of the norms for the test. The remaining three pupils had gains in standard scores of from two to fifteen points.

The Wide Range Achievement Test was used as a measure of basic skills in reading, spelling, and arithmetic. It was felt earlier that results would provide a measure of academic progress. Grade equivalent results are given in Table 4.49 for the group.

TABLE 4.49

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR ORTHOPEDICALLY HANDICAPPED - SECONDARY LEVEL

	May '67 N = 4	May '68 N = 7
Reading Sub-Test		
G. E. Mean	5.4	5.0
G. E. Median	4.9	3.2
G. E. Range	2.4 - 9.3	1.7 - 10.5
Spelling Sub-Test		
G. E. Mean	5.4	4.2
G. E. Median	5.4	3.3
G. E. Range	3.7 - 7.0	2.2 - 7.4
Arithmetic Sub-Test		
G. E. Mean	7.0	4.7
G. E. Median	6.2	3.4
G. E. Range	2.9 - 12.8	1.5 - 12.3

A limitation placed on these results would be the difference in the number of pupils from one year to the other. For the four pupils taking both tests, we find the mean grade equivalent in reading going from 5.4 to 7.0, the mean grade equivalent in spelling from 5.4 to 5.3, and the mean grade equivalent in arithmetic going from 7.0 to 6.2. The obvious difference in the two groups of scores is a wider range of scores for the seven pupils in May '68 than for the four pupils in May '67.

The supplementary classroom teachers were asked to rate the progress they had observed in the academic areas used in the previous test. The frequency of ratings for all seven pupils is given in Table 4.50.

TABLE 4.50

FREQUENCY OF TEACHER RATINGS IN READING, SPELLING, AND ARITHMETIC - ORTHOPEDICALLY HANDICAPPED, SECONDARY LEVEL

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Growth in				
a. Reading	4	3	0	0
b. Spelling	3	4	0	0
c. Arithmetic	4	2	1	0

A comparison of the teacher ratings and gains or losses in grade equivalent measures on the three subtests of the Wide Range Achievement Test can now be made. This comparison for the four pupils taking both tests is given in Table 4.51.

TABLE 4.51

COMPARISON OF TEACHER RATING AND PUPIL GAIN OR LOSS IN G. E. ON THE WIDE RANGE ACHIEVEMENT TEST

Teacher Rating					Totals
Much	3	2	0	0	5
Moderate	1	3	1	1	6
Slight	0	1	0	0	1
Little or None	0	0	0	0	0
					12
Gain or Loss in G. E.	G. E. Loss	Gain 0 - .4	Gain .5 - .9	Gain 1.0 or above	

As indicated in Table 4.51, four of the twelve teacher ratings of moderate to much progress actually scored lower in grade equivalent on the same subtest on the posttest for the Wide Range Achievement Test. It might be noted also that five others rated moderate to much had gains of less than one-half year on the WRAT subtests.

Teachers were also asked to rate growth they had observed in positive changes in attitude. In addition, ratings were also given in progress in skills. Results of the frequency of the teacher ratings are given in Table 4.52.

TABLE 4.52

FREQUENCY OF TEACHER RATINGS OF OBSERVED POSITIVE GROWTH IN ATTITUDES AND SKILLS ORTHOPEDICALLY HANDICAPPED - SECONDARY LEVEL

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
2. Positive change in attitude toward				
a. Self	5	2	0	0
b. School	5	2	0	0
c. Others	4	3	0	0
3. Growth or progress in the following:				
a. Study skills	7	0	0	0
b. Physical skills	7	0	0	0
c. Musical skills	7	0	0	0
d. Artistic skills	6	1	0	0

Ratings given by the teacher were moderate to much in all areas indicated in the table for all pupils rated.

Limitations inherent in all testing situations apply to the results presented. In addition, factors involved in the varied handicaps within this group as well as possible inappropriate evaluative tools further compound the problem of assessing the amount of growth or progress exhibited by the pupils in this group.

Examinations of the end of year staffing reports revealed that all seven were recommended for return to the program for the coming year. One of the pupils has earned enough credit to graduate from his parent high school upon completion of the next year's work.

CLASSROOM SUPPORTIVE SERVICES

The art consultant provided consultive assistance in working toward the objectives of providing for development of fine motor and gross motor skills, improvement of hand - eye coordination, and introducing the pupils to the history of art.

Included in the activities were projects using watercolors, tempra, and other media for two dimensional work. Several three dimensional projects involving wood construction, copper foil tooling, wood sculptures, and plaster or zonolite sculptures were also presented. The art consultant also presented an introduction to the history of art by using slides, records, and books.

The projects were assessed by the consultant as being esthetic and beautiful in design, color, form, and texture. The pupils appeared to enjoy the introduction to the history of art. No measure of knowledges gained were attempted during the year.

To present activities which students can participate in at home during leisure time and to improve rhythm and/or coordination were objectives set forth by the music consultant for this group.

A presentation of notes and their time values was presented in the traditional manner. Various instruments were presented including flutophones, the chord organ, and rhythm instruments. The consultant reported that these pupils appeared to want activities just as a "normal" class receives them.

Results, as observed by the consultant, indicate that two pupils acquired note names and counting concepts which they could apply to playing the chord organ. Others were able to play only when the notes were assigned numbers and matched with numbers on the key board. It appeared that improvement in muscle strength was made in that the pupils were able to gradually spend longer periods of time with various activities without tiring.

Physical education activities were presented and supervised by the physical education consultant. The program presented was based on the following set of objectives:

1. To establish a liking for physical activity.
2. To familiarize pupils with rules of sports and games.
3. To contribute to the improvement of mental health and organic vigor.

4. To contribute to the learning of suitable habits and skills for the intelligent wholesome use of leisure time.
5. To develop attitudes that will result in the desire to correct in so far as possible the defects the pupil has, whether it be physical, mental, social, or emotional.

Most of the activities were conducted in the gymnasium in an attempt to make the class as nearly a "regular" gym class as possible. Activities for each individual were dependent upon the extent to which he was able to move various parts of the body. "Running" laps in wheel chairs was accomplished by all but one of these pupils. Basket shooting and dribbling were used to improve eye - hand and arm coordination. Ten inch rubber playground balls were used to replace the regular size and weight basketball. The music consultant assisted in wheel chair square dancing using sixth grade girls from the elementary school in which this classroom was housed.

No definite records of physical improvement were kept. The consultant reported a genuine interest in all attempts at various activities on the part of the pupils. It appeared that a gradual increase in the amount of time spent in various games and activities was evident.

One pupil was selected from each classroom for further investigation. The selection was not made on a random basis but as a result of a joint effort between the center staff, the classroom teacher, and members of the Research Division. The pupil selected from each classroom was not primarily representative of the type of pupil placed in that specific classroom, but it was the intent to make the case study pupils representative of the types of handicaps within the supplementary classroom program. The following summary is for the pupil selected from the Severely Orthopedically Handicapped, Secondary School Age classroom.

CASE STUDY SUMMARY

Background Information

Family History

The subject was a male Caucasian born in November, 1952. He had two siblings, an older sister and a younger brother. The family resided in a middle-class neighborhood. The father was an aeronautical engineer and was employed by a local aircraft company. The mother had attended college but remained in the home as a housewife. She was very active in service groups for exceptional children, at one time being state president of an association for retarded children. The family did many things as a group. They owned an airplane and frequently took short trips together. The parents appeared to have accepted the subject's problems very well.

Health History

No records were available concerning the subject's birth. The parents believed, however, that some brain damage had occurred prior to birth. He did not walk or talk until he was four and one-half years old. Coordination and balance were very poor.

The mother reported that the subject had been under medical supervision since birth. The pediatrician diagnosed him as being spastic, epileptic and visually impaired. Medication and a low sodium diet were prescribed to control seizures. Medication was also given to control hyperactive behavior.

School Adjustment and Achievement

The subject was enrolled in a local public school at the age of six years. He was placed in an ungraded special education classroom. He appeared well-adjusted and the teacher believed that he made progress in physical and academic areas during the year. The next year he was placed in a classroom in the same school for children with orthopedic handicaps and remained there for six years. Reports from his teacher during this period remained quite consistent from year to year. He was seen as a well-adjusted, somewhat hyperactive child who worked slightly below grade level. It was believed that his various handicaps prevented him from doing as well as he could. Highest achievement was in reading, spelling and language, while much improvement was needed in arithmetic and penmanship.

A Wechsler Intelligence Scale for Children was given by the school counselor in 1964. It produced results which the counselor believed were not applicable to the subject. She believed, however, that it could be used as an index to the subject's strengths, weaknesses and educational needs. Scores in Block Design and Arithmetic placed the subject easily within the average range of intelligence. Low scores were in Comprehension and Picture Arrangement, areas highly influenced by opportunities for social experiences which handicapped children often do not have. In summary, the counselor believed that the subject had an average ability to learn.

Referral, Evaluation, Recommendations and Placement

Referral

Since the subject had been a pupil in the program for orthopedically handicapped children for seven years, and since the Title III secondary classroom for orthopedically handicapped children was the only placement available, the formal referral procedure was not followed. The subject was recommended for placement in the classroom by school personnel. Actual placement of the subject was supervised by one of the Center coordinators.

Evaluation

Information from the subject's school folder was obtained and examined by Center personnel including the staff school psychologist assigned to the case.

Recommendations and Placement

It was believed that the secondary classroom for children with orthopedic handicaps would provide the appropriate educational environment for the subject and a recommendation for placement was made.

As a result of the recommendation the subject was placed in the classroom for secondary school age children with orthopedic handicaps in the fall of 1966. At the close of the 1966-67 school year it was recommended that the subject remain in the classroom for the 1967-68 school year. The remainder of this summary will deal with what occurred during that year.

Objectives, Procedures and Results

Objectives

An attempt was made to provide the subject with materials and equipment which might facilitate learning, to improve coordination and to improve academic skills.

Procedures

At the beginning of the year it was observed that the subject was having increasing difficulty reading and/or producing assignments which required the use of any printed material. Though it was known that he had a visual handicap, the degree to which the handicap interfered with his work was not known. During the time he was supposed to be preparing his assignments he appeared frustrated, working only sporadically, making vocal noises, pulling his hair, and/or bothering other pupils. The teacher contacted the Center peripatologist and librarian for the visually impaired and requested special materials and equipment for the subject. An adjustable book holder, Swing-O-Lite lamp and large-print texts in geography, sociology, English and literature were provided. A tape-recorded text in typing was also provided. No large-print mathematics texts were available. After these materials were in use in the classroom, the teacher observed that the subject was working for longer periods of time; as long as an hour or an hour and a half on reading, science and typing. An average of 10 minutes, however, was spent on mathematics assignments. These assignments were hand-made by the teacher since the large-print text was not available.

It appeared that the subject's coordination could be improved. His writing was nearly illegible but improved with continual encouragement from the teacher. It was hoped that specific activities involving the use of fingers, hands and arms would further improve his handwriting. Typing was one of the activities used to provide exercise. This was highly reinforcing to the subject and he did many of his English assignments on the typewriter. Playing the chord organ also provided a specific type of exercise as did sanding, filing, and sawing. Improvement in coordination could not be specifically measured, however it was observed that the subject spent increasingly longer periods of time participating in the above activities without appearing to tire. Fewer errors occurred on the typewriter and chord organ as the year progressed. According to teacher reports, penmanship was much improved at the end of the year.

A great deal of growth was seen in the area of reading as measured by the Wide Range Achievement Test. Reading results in the spring were were 10.5 as compared to 5.4 in the fall. The teacher believed that the magnifying devices and large-print books greatly facilitated this growth. Spelling and Arithmetic scores remained stable.

Staff consultants in art, music and physical education worked with the subject regularly. The resource consultant provided various materials for the room and demonstrated their use to the teacher. Specific activities conducted by the consultants are described under the Classroom Supportive Services topic of this section.

The art consultant reported tremendous growth in the areas of coordination and control. She also believed that the subject had gained in his awareness of things around him and had expressed them quite well. Socially, his behavior was more appropriate at the end of the year than at the beginning. Hyperactivity was not a problem in the art area.

Improvement in self-control and coordination was also observed by the music consultant. Initially the subject could not participate in a group music activity due to inappropriate behavior. Instruments were taken away and/or the subject was asked to leave the group as a result of inappropriate behavior. After two sessions inappropriate behavior decreased and the subject was able to participate with the group. Coordination appeared to improve. The subject spent increasingly longer periods of time playing the chord organ and made fewer errors. Tape-recorded selections of his playing at the beginning and end of the year were judged by the consultant to sound much smoother at the end of the year.

Basic calisthenics were done consistently in physical education. In addition the physical education consultant attempted to train the subject to use his ears rather than his eyes in specific activities. For instance, in shooting baskets the consultant asked him to listen to the different sounds the ball made as it hit the rim, backboard, or went through the net. After this he was shown how to shoot. At the beginning of the year he was not getting close to the basket at all, but by the year's end he was hitting it while gradually moving farther away.

At a staffing held in May, 1968, the staff members agreed that the subject had made a great deal of progress in both social and academic areas. It was recommended that he remain in the classroom for the 1968-69 school year. It was also recommended that large-print Mathematics texts be obtained.

TRAINABLE MENTALLY HANDICAPPED
SECONDARY SCHOOL AGE

One supplementary classroom served mentally retarded adolescents ages fifteen to twenty-one. This program provided for some pupils who might otherwise not attend school or who would have to wait some time before entering a state institution. These pupils would be unable to participate in any type of regular or slow moving program at the educable level.

OBJECTIVES

1. To improve communicative skills.
2. To improve physical skills.
3. To enable pupils to more adequately care for themselves.
4. To improve personal and social adjustment.
5. To develop work habits, attitudes, and skills.
6. To promote worthy use of leisure time.
7. To discover and devise effective teaching techniques and superior instructional materials for trainable mentally handicapped students.

METHODS AND PROCEDURES

A maximum class load of ten pupils was maintained throughout the year in the classroom provided for trainable mentally retarded youth. A qualified classroom teacher with the assistance of a teacher aide conducted activities which were geared to amplifying work in self-care, language development, social adjustment, and skills which enhance employability. Supportive personnel provided assistance in the development of physical, artistic, and musical skills for usage in leisure time activities. Experiences were provided which pertained to personal hygiene, care of clothing, eating habits, safety rules, use of various types of equipment, telephone skills, and a variety of listening and viewing experiences to further the development of self sufficiency.

Repetition of materials and varied presentations of the same material content were used in working with this type of pupil. A variety of furniture, audio-visual equipment, and easy to use instructional materials was necessary to provide experiences which lead to self sufficiency among pupils in the classes.

PUPILS PLACED IN CLASSROOM

Examination of pupil records maintained by the teacher and other school personnel revealed the following information about the pupils:

Age range at entrance: 14 years, 7 months to 19 years, 1 month.
Race: 10 Caucasian, 1 Spanish-American.
Sex: Seven male, four female.

A total of eleven pupils were placed in the classroom. One pupil was removed as a result of placement in a state mental institution during January. A new pupil was staffed into the classroom the first week of February, maintaining a class load of ten pupils.

Attendance information indicates that while assigned to the special classroom the pupils' attendance varied from a low of seventy-two percent to a high of one-hundred percent. The mean attendance for those enrolled was ninety-three percent.

PUPIL RESULTS

The Peabody Picture Vocabulary Test was used as a pretest, posttest measure of verbal ability. Nine of the eleven pupils placed in the classroom had scores on both tests. Results of the PPVT are presented by individual pupils in Table 18 found in Appendix B. Summarized results are presented in the following table.

TABLE 4.53

PEABODY PICTURE VOCABULARY TEST RESULTS FOR TRAINABLE MENTALLY HANDICAPPED-SECONDARY SCHOOL AGE

N = 9	October	May
Raw Score Mean	60.9	63.4
Raw Score Median	60	65
Raw Score Range	44-95	42-93
Standard Deviation	13.1	13.9
Standard Score Mean	55.3	54.6
Standard Score Median	56	58
Standard Score Range	38-86	29-82
Standard Deviation, Standard Score	12.6	13.9

Raw score means show a slight increase while standard score means show a slight decrease. Standard scores on the PPVT are higher for most pupils than individual Binet or WISC scores.

The Wide Range Achievement Test was used as a measure of basic skills in reading, spelling, and arithmetic. Individual pupil results are presented in Appendix B, Table 19. Group results on the three subtests are given in the following table. Results are based on nine pupils who had scores on both tests.

TABLE 4.54

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR TRAINABLE
MENTALLY HANDICAPPED - SECONDARY SCHOOL AGE

N = 9	October	May
Reading Subtest		
G. E. Mean	1.7	1.8
G. E. Median	1.7	1.8
G. E. Range	Kg.2-4.4	Kg.1-4.6
Raw Score Mean	16.3	17.0
Raw Score Median	18	19
Raw Score Range	4-29	2-30
Spelling Subtest		
G. E. Mean	2.2	2.3
G. E. Median	1.9	2.2
G. E. Range	1.0-4.0	1.3-4.3
Raw Score Mean	5.8	6.0
Raw Score Median	5	6
Raw Score Range	2-11	3-12
Arithmetic Subtest		
G. E. Mean	Kg.7	1.1
G. E. Median	Kg.6	1.0
G. E. Range	PK.2-1.5	N.9-1.9
Raw Score Mean	5.4	7.0
Raw Score Median	6	8
Raw Score Range	0-9	0-10

The group did exhibit very slight gains as evidenced by scores made on the WRAT. This instrument is not sensitive enough to determine whether or not these are real gains with this type of pupil. Another indicator of progress shown in these areas is the teacher opinion or rating. The teacher was asked to rate the growth or progress observed for each pupil. Included in the rating was attitudinal changes and growth or progress observed in skill areas. Results of these ratings are given in the following table.

TABLE 4.55

FREQUENCY OF TEACHER RATINGS IN ACADEMIC AREAS, ATTITUDES, AND SKILLS
TRAINABLE MENTALLY HANDICAPPED - SECONDARY SCHOOL AGE

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Growth in:				
a. Reading	0	4	2	4
b. Spelling	0	1	4	5
c. Arithmetic	0	3	3	4
2. Positive change in attitude toward:				
a. Self	1	6	3	0
b. School	0	8	2	0
c. Others	0	5	5	0
3. Growth or progress in the following:				
a. Study skills	0	4	3	3
b. Physical skills	0	5	5	0
c. Musical skills	0	4	4	2
d. Artistic skills	0	7	2	1

A comparison can be made between gains or losses on the WRAT subtests in reading, spelling, and arithmetic, and the ratings given by the teacher in these same areas. This comparison is shown in Table 4.56.

TABLE 4.56

COMPARISON OF TEACHER RATINGS AND PUPIL GAINS OR LOSSES ON WRAT SUBTESTS - TRAINABLE MENTALLY HANDICAPPED, SECONDARY SCHOOL AGE

Teacher Rating					Totals
Much	0	0	0	0	0
Moderate	1	5	2	0	8
Slight	0	8	1	0	9
Little or None	2	6	1	1	10
Gain or Loss in G. E.	G. E. Loss	Gain 0-.4	Gain .5-.9	Gain 1.0-1.4	27

Table 4.56 shows that sixteen ratings of the twenty-seven given by the teacher as having little or none to slight progress also had grade equivalent gains of less than one-half year or a grade equivalent loss.

Five pupils in the group were in the program the previous year and had test scores that can be compared from the previous May to the results in May of this year. These results are given in the following table.

TABLE 4.57

COMPARISON OF STANDARD SCORES FOR FIVE PUPILS, MAY '67 TO MAY '68 - TRAINABLE MENTALLY HANDICAPPED SECONDARY SCHOOL AGE

	May '67	May '68
Pupil 1		
WRAT		
Reading	56	59
Spelling	59	58
Arithmetic	53	54
PPVT	37	29
Pupil 2		
WRAT		
Reading	61	62
Spelling	66	64
Arithmetic	58	59
PPVT	56	58
Pupil 3		
WRAT		
Reading	52	52
Spelling	59	59
Arithmetic	52	46
PPVT	40	40
Pupil 4		
WRAT		
Reading	66	74
Spelling	70	72
Arithmetic	54	60
PPVT	53	60

TABLE 4.57 (continued)

Pupil 5	May '67	May '68
WRAT		
Reading	57	59
Spelling	60	62
Arithmetic	54	55
PPVT	62	61

Table 4.57 indicated what might be expected of the trainable pupil. There is not a great deal of fluxuation of test scores from year to year and the level of performance is in the range of expectancy for the very low ability pupil. There is an indication of the reliability of the measures used. There also appears to be a positive correlation between the test results and the teacher ratings for the same pupils. No statistic is given due to the small number in the group.

End of the year staffing reports show that the Evaluative Committee recommended nine of the ten pupils in the class at that time be returned to the same class for the coming year. The recommendation for the other pupil was to not accept him due to the poor attendance record over a two year period and to suggest a private school placement where adequate treatment is available.

CLASSROOM SUPPORTIVE SERVICE

The art consultant developed activities for the class by using the area of art as an avenue of expression, a source of enjoyment, and a means of experiencing something in the classroom that might lead to a hobby. Activities included wood construction, weaving, burlap painting, work with clay, and making cloth place mats with designs.

The consultant felt the most successful projects were of a three dimensional nature. One shortcoming lies in the area of planning. It is extremely difficult to plan the length of time needed for pupils to complete projects.

To improve rhythmical behavior, and identify basic rhythm instruments; these were objectives set forth by the music consultant.

Rhythmical activities involving body movement with and without instruments was presented. Identification of rhythm instruments and their sounds was presented in a game situation.

The music consultant reported that general improvement was apparent in modifying rhythmical behavior. Three pupils were able to maintain appropriate rhythm continuously in all rhythmical activities. Only one of these pupils was able to respond appropriately at the beginning of the year. Six pupils were able to maintain appropriate rhythm continuously while playing rhythm instruments, and sporadically during body movements. At the beginning of the year these six pupils could not maintain appropriate rhythm even on simple rhythm instruments. The last pupil staffed into the classroom was able to respond appropriately in rhythmical activities only occasionally.

The consultant for physical education indicated that objectives for this group would include improving over-all physical fitness, improving coordination, balance, and perceptual ability.

A program of calisthenics for a 36 week period of time was developed by the consultant. Ten basic exercises, used in a twenty to twenty-five minute period daily, with a gradual increasing of the number of repetitions of the exercises were utilized as a major portion of the program. The balance beam and balance board were designed to aid in coordination, balance, and perceptual ability. Running was used to help increase respiratory and cardiovascular efficiency, and to aid in developing better endurance.

As one measure of effects of the program, the consultant gave the American Association of Health, Physical Education, and Recreation Youth Fitness Test. Results for individuals are given in Table 20 found in Appendix B. Means and ranges of those having both fall and spring results are presented in Table 4.58.

TABLE 4.58

RESULTS OF AAHPER YOUTH FITNESS TEST FOR TRAINABLE MENTALLY RETARDED - SECONDARY SCHOOL AGE

Measures	Fall Test	Spring Test	Gain
Pull-ups (number)			
Mean	.2	1.3	1.1
Range	0-1	0-8	1-7
Sit-ups (number)			
Mean	7.1	15.8	8.7
Range	0-18	0-39	0-21
Shuttle Run (seconds)			
Mean	14.8	13.6	-1.2
Range	22.2-12.0	17.4-11.1	+.5 - -4.4

TABLE 4.58
(continued)

Standing Broad Jump (inches)			
Mean	35.9	35.1	-.8
Range	10-57	8-52	-10-14
50-Yard Dash (seconds)			
Mean	11-9	10-7	-1.2
Range	24.6-6.7	14.4-7.6	1.7 - -10.2
Softball Throw (feet)			
Mean	73.7	66.6	-7.1
Range	11-146	13-131	-27-10
600-Yard Run-Walk (minutes)			
Mean	4.47	3.70*	-.77
Range	6.27-3.40	5.42-2.44	.87 - -1.97

*Only seven pupils had fall and spring scores.

Table 4.58 shows that, as a group, this class had gains in five of the seven activities. Losses occurred in the standing broad jump and the softball throw. Individual pupils made relatively good gains in one or two of the activities.

The consultant reported that success was due in part to cooperation from the teacher and aide. He was pleased that the teacher initiated activities such as bowling and roller skating.

During the first year of operation a curriculum rating scale and a rating guide was developed by the supplementary classroom teacher and Research Division personnel. During the past year this scale and guide was revised in an attempt to screen and use only those items most appropriate to this age level. A copy of the revised scale and guide is in Appendix A. Each pupil was rated by the classroom teacher in terms of a performance level of one to five. Some items may not apply to every pupil, therefore some items were not rated for all pupils. The instrument was not standardized and differences in mean scores may only be interpreted as an indication of progress or lack of progress.

Five of the pupils rated this year were also in the group the previous year. Rather than a report of differences of mean scores for this year, Table 4.59 shows differences in mean scores from January of the previous school year to November of the past school year.

TABLE 4.59

MEAN SCORES ON SELECTED CURRICULUM GUIDE ITEMS FOR FIVE PUPILS - TRAINABLE MENTALLY HANDICAPPED SECONDARY SCHOOL AGE

Guide Items N = 5	Mean Scores Jan. '67	Nov. '67
Physical Growth and Development		
Motor Development	3.4	3.3
Manipulative Development	1.9	2.4
Organized Games	1.3	2.4
Musical Games and Rhythm	3.2	3.5
Self Care		
Personal Hygiene	2.7	3.9
Clothing	3.9	3.6
Eating	4.0	4.1
Safety	2.9	3.6
Communicative Abilities		
Listening and Speaking	3.5	3.8
Identification	3.7	4.3
Word Recognition	3.7	3.6
Writing	3.6	---*
Number, Time, and Money Concepts	3.3	2.0
Work Skills and Habits		
Care of Equipment and Materials	2.0	1.6
Meals	1.6	2.7
Cleaning	1.2	2.4
Care of Clothing	0.4	2.1
Home Responsibilities	0.8	2.2
Leisure Time Activities		
Listening and Viewing Activities	3.7	4.7
Art Activities	2.4	3.1
Music Activities	3.8	3.9
Sports and Games	3.3	3.2

*Item omitted from Revised Form

In addition to the item noted as being omitted from the revised form, an entire section on social adjustment was omitted from the previous form. There is some indication, according to mean scores, that some growth is shown from one school year to the next in each of the five curriculum areas rated. The limitations involved are small groups of pupils, the instrument is not standardized, and scale intervals are probably not equal.

One pupil was selected from each classroom for further investigation. The selection was not made on a random basis but as a result of a joint effort between the center staff, the classroom teacher, and members of the Research Division. The pupil selected from each classroom was not primarily representative of the type of pupil placed in that specific classroom, but it was the intent to make the case study pupils representative of the types of handicaps within the supplementary classroom program. The following summary is for the pupil selected from the Trainable Mentally Handicapped, secondary school age classroom.

CASE STUDY SUMMARY

Background Information

Family Information

The subject was a female Caucasian, born in January, 1949. She had one older male sibling. The family resided in a lower-middle-class neighborhood. The father stayed at home due to a severe heart condition. The mother was a housewife. She appeared to be very overprotective of the subject and would not allow her to do anything for herself. The time the subject was at home was spent looking at television or magazines. The subject was apparently completely dependent on her mother.

Health History

The subject was born when the mother was of middle age. She weighed over ten pounds at birth.

The subject never crawled nor did she walk until after two years of age. Toilet training was not completed until after she was five years old. General health appeared good.

School Adjustment and Achievement

The subject began kindergarten at the age of five. Soon after, observations by the teacher and tests given by the school psychologist revealed that the subject was apparently mentally retarded. She was placed in a classroom for educable mentally handicapped children for several years and then transferred to a room for trainable mentally handicapped children due to her inability to keep up with the group in the other classroom. Referral to the Title III TMH classroom was made as the subject was old enough for Level IV (ages 16-21) TMH placement.

Referral, Evaluation, Recommendations and Placement

Referral

During March, 1967, a referral form for the subject was processed by the Center. Because of behavioral characteristics and previous test results, consideration for placement in the classroom for trainable mentally handicapped children was requested. Center personnel including a staff school psychologist were assigned to the case.

Evaluation

The results of tests given by the staff school psychologist substantiated results obtained from previous testing. On the Wide Range Achievement Test, the subject received a score of 2.6 in Reading, 3.0 in Spelling, and 1.0 in Arithmetic. The Peabody Picture Vocabulary Test yielded an IQ score of 86 and a mental age of fourteen years and six months.

Recommendations and Placement

All personnel involved in the case discussed their findings and it was recommended that the subject be placed in the secondary program for the trainable mentally handicapped. As a result of the recommendation, the subject was placed in the classroom at the beginning of the 1967-68 school year.

Objectives, Procedures and Results

Objectives

Attempts were made to increase participation in classroom activities and to improve independent functioning.

Procedures and Results

Techniques which achieved positive results with the subject consisted of individual encouragement, firmness, and behavior modification procedures.

It was observed that the subject's limited participation in classroom activities was related to a small picture cut from a magazine which she carried in her hand continually. This restricted her from doing many things. Continual firm reminders that she was not to hold the picture during classroom activities resulted in her putting the paper away occasionally. Though this approach helped, the results did not sustain over a long period of time. It was finally agreed that if the picture was seen in her hand, the teacher or teacher aide would tear it up. This technique did produce lasting results.

Individual verbal encouragement to begin participating in a specified activity and verbal reinforcement by the teacher following participation resulted in increased participation in all classroom activities.

A similar technique was used to get the subject to initiate and maintain certain behaviors independently (clearing the table, setting the table, washing the dishes, ironing). Initially she was verbally encouraged to and rewarded for doing a specific thing. Gradually the encouragement was withdrawn and the subject was verbally rewarded only for doing a specific thing independently. This procedure resulted in occasional initiation of specific behaviors by the subject. Though the subject participated, she would seldom do so without encouragement.

In December, 1967, the Diagnostic Center referred the subject and her mother to a clinical psychologist for evaluation and recommendations with the idea in mind that perhaps the mother could be helped to see that the subject must be allowed to do some things independently. The psychologist reported, however, that the mother's pattern of keeping the subject dependent was too well-established to effect any change.

Staff consultants in art, music and physical education worked with the subject regularly. The resource consultant provided various materials for the classroom and demonstrated their use to the teacher. Specific activities conducted by the consultants are described under the Classroom Supportive Services topic in this section.

The art consultant found that forcefully removing the magazine clipping initially, and then reminding the subject to put it away resulted in the subject "giving up" the piece of paper. Art activities were introduced which required the use of the fingers used to hold the paper which had all but atrophied from lack of use. Very little facial expression was noted and never did the subject begin doing something without being reminded. The consultant reported that though the symbols in her drawings changed little during the year, she did add hair and a dress to her self-concept drawing at the end of the year.

The music consultant reported that in most music sessions the expression on the subject's face indicated happiness or pleasure. Initially, verbal requests to put away the paper resulted in pouting. When the subject was firmly told prior to each session that she could not participate with the group unless the paper was put away, she complied. Activities were used which required the use of the fingers which had not been used due to "paper-holding." It was reported by classroom personnel that of all classroom activities, music elicited the most response from the subject.

Problems in the physical education area were identical to those described by the classroom teacher and other consultants. However, firm insistance that the subject participate resulted in some growth in the area. An AAHPER and a modified Kraus Weber Test were administered to the subject in the fall and spring (See Part 5 for description of modification). Results of these tests can be seen in the following tables.

TABLE 4.60

AAHPER FALL AND SPRING RESULTS CASE STUDY PUPIL, TRAINABLE MENTALLY HANDICAPPED, SECONDARY SCHOOL AGE

Measures	Fall	Spring
Pull-Ups (number)	0	0
Sit-Ups (number)	5	10
Shuttle Run (seconds)	22.2	17.8
Standing Broad Jump (inches)	17	31
50-Yard Dash (seconds)	24.6	14.4
Softball Throw (feet)	11	20
600-Yard Run-Walk (minutes)	6.4	—

TABLE 4.61

KRAUS WEBER FALL, WINTER AND SPRING RESULTS CASE STUDY PUPIL, TRAINABLE MENTALLY HANDICAPPED, SECONDARY SCHOOL AGE

	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Total
Fall	1	(.25)	(.4)	(.5)	(.6)	0	2.75
Winter	1	2	(.2)	(.6)	(.6)	6	4.40
Spring	1	(.75)	(.1)	0	0	0	1.85

It was believed by all personnel involved that very definite and observable progress was made by the subject. She had grown from a shy, withdrawn individual to an active classroom participant. Though most behaviors occurred only through encouragement, on occasion they occurred independently. "Paper-holding" was one behavior which was consistently not observed as the year drew to a close which represented a big improvement. If any help from the home had been apparent, much more may have been accomplished.

The Diagnostic Center Evaluative and Admissions Committee held a staffing in May, 1968, and the following recommendations were made:

(1) The subject should remain in the classroom for trainable mentally handicapped children.

(2) The Diagnostic Center should contact a local educational and vocational center for the retarded and investigate as to what program can be initiated for the subject in the future.

EMOTIONALLY DISTURBED
ELEMENTARY GRADES 3-4

One supplementary classroom was provided for pupils, grade levels three and four, who had emotional handicaps. These pupils were unable to benefit from regular classroom instruction even when supportive assistance was provided. Pupils placed may be described as having a combination of characteristics such as the following: excessive daydreaming, inappropriate emotional responses, intense fears, excessive withdrawal, irresponsible social behavior, and perceptual disabilities.

OBJECTIVES

1. To enable pupils to achieve academically at levels appropriate to age, grade, and intelligence.
2. To improve the pupils' ability to express themselves in non-verbal areas.
3. To discover and devise effective teaching techniques and superior instructional materials for children with emotional disturbances.
4. To improve attitude toward self, school, and others.
5. To improve and further develop motor skills and coordination.
6. To improve personal and social adjustments so that successful reentry into the regular classroom can be effected.

METHODS AND PROCEDURES

The classroom for this grade level pupil with emotional problems, provided a curriculum which included some of the work from the regular program of studies as well as special programs geared to the individual child. A wide variety of instructional materials, listed in another section of this report, was available to provide individual instruction at the level best suited for the pupil. When necessary, study carrels were utilized to provide for individual study and reduction of external stimuli.

A qualified teacher provided the instructional leadership with the assistance of a part-time teacher aide. Supportive services provided by the coordinator of the psychologically handicapped, the staff school psychologists, and the curriculum consultants in art, music, and physical education were available for usage by the teacher.

PUPILS PLACED IN CLASSROOM

Examination of pupil records maintained by the teacher and other personnel revealed the following information about the pupils:

Age range at entrance: 9 years, 0 months to 11 years, 1 month.
Race: Eight Caucasian, One Negro.
Sex: Six male, three female.

A total of nine pupils were placed in the classroom, five at the beginning of the school year, one placed three months later, and three others placed during the second semester. One pupil who was placed at the beginning of the year moved at the end of December; therefore, a maximum class load of eight pupils was maintained throughout the school year.

Attendance information shows that while assigned to the special classroom the pupils' attendance varied from a low of seventy-two percent to a high of one hundred percent. The mean attendance for those enrolled was ninety-four percent. Two of the pupils who were placed in the classroom during the second semester had maintained eighty-five percent and ninety-one percent attendance records in their regular classroom before entering the program.

PUPIL RESULTS

The Peabody Picture Vocabulary Test was used as a pretest, posttest measure of verbal ability. Six of the pupils placed in the classroom had scores on both tests for the past year. Results for individual pupils are given in Table 21 , found in Appendix B. Means, medians, and ranges for raw scores and standard scores are reported in the following table.

TABLE 4.62

PEABODY PICTURE VOCABULARY TEST RESULTS FOR EMOTIONALLY DISTURBED - GRADES 3-4

N = 6	October	May
Raw Score Mean	75.5	74.5
Raw Score Median	75	77
Raw Score Range	69-85	64-83
Standard Deviation	5.3	7.6
Standard Score Mean	102.3	93.3
Standard Score Median	101	96
Standard Score Range	90-115	74-108
Standard Deviation, Standard Score	8.5	10.3

Form A of the Peabody Picture Vocabulary Test was used in October and Form B was used in May. There was a slight decrease in mean raw score from October to May and a larger decrease in standard score means from October to May for those pupils taking both tests. When two additional pupils' scores were included in the May test results, the mean standard score is 93.8, the median is still 96, the range from 72-118, and the standard deviation is 14.6.

The Wide Range Achievement Test was used as a measure of the basic skills in reading, spelling and arithmetic. It was felt earlier that results would provide a measure of academic progress. Complete individual results for all pupils tested are in Appendix B, Table 22. Group results are summarized in the following table.

TABLE 4.63

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR EMOTIONALLY DISTURBED - GRADES 3-4

N = 9	October	May
Reading Subtest		
G. E. Mean	2.8	3.4
G. E. Median	2.6	3.6
G. E. Range	1.0-4.4	Kg.8-5.1
Raw Score Mean	45.8	50.2
Raw Score Median	47	54
Raw Score Range	22-60	19-65
Spelling Subtest		
G. E. Mean	2.4	2.4
G. E. Median	2.4	2.5
G. E. Range	1.3-3.5	1.1-3.5
Raw Score Mean	29	29
Raw Score Median	30	30
Raw Score Range	21-36	19-34
Arithmetic Subtest		
G. E. Mean	3.1	3.5
G. E. Median	3.4	3.9
G. E. Range	2.1-3.9	1.0-5.0
Raw Score Mean	26.8	28.0
Raw Score Median	29	30
Raw Score Range	22-30	16-34

Mean grade equivalents increase slightly for the group on the reading and arithmetic subtests. The mean grade equivalent remained the same on the spelling subtest. Median grade equivalents increased slightly more from pretest to posttest than did the means.

The supplementary classroom teachers were asked to rate the progress of pupils in the area of reading, spelling, and arithmetic. The frequency of teacher ratings for this group are given in Table 4.64. The same six pupils used in the previous presentation were also used here.

TABLE 4.64

FREQUENCY OF TEACHER RATINGS IN READING, SPELLING, AND ARITHMETIC - EMOTIONALLY DISTURBED GRADES 3-4

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Growth in:				
a. Reading	1	2	2	1
b. Spelling	0	1	3	2
c. Arithmetic	1	4	0	1

TABLE 4.65

FREQUENCY OF GAINS OR LOSSES IN G. E. ON WRAT SUBTESTS - EMOTIONALLY DISTURBED GRADES 3-4

Subtest	G. E. Gain			G. E. Loss
	1.0 or more	0.5-0.9	0-0.4	
Reading	1	1	3	1
Spelling	0	1	2	3
Arithmetic	1	3	1	1

The frequency of gains or losses in grade equivalents shown in Table 4.65, indicates that most pupils had some gain in grade equivalent on the WRAT subtests of reading and arithmetic. There are as many losses as gains on the spelling subtest for the group. Some indication of these frequencies is given in the results presented in Table 4.63.

A comparison of the gain scores on the WRAT subtests and the teacher ratings in those areas can now be made. This comparison is presented in the following table.

TABLE 4.66

COMPARISON OF TEACHER RATING AND PUPIL GAIN OR LOSS IN G. E. ON THE WRAT - EMOTIONALLY DISTURBED GRADES 3-4

Teacher Rating					Totals
Much	0	0	0	2	2
Moderate	1	1	5	0	7
Slight	2	3	0	0	5
Little or None	2	2	0	0	4
Gain or Loss in G. E.	G. E. Loss	Gain 0-.4	Gain .5-.9	Gain 1.0-above	18

The above comparison gives an apparent high relation between teacher ratings of progress and indicated gains or losses as measured by the WRAT subtests. No further analysis is made at this time.

The teacher also supplied the approximate beginning and ending grade levels of the materials used in the classroom in the same three areas of reading, spelling, and arithmetic. The levels the teacher reported for materials were approximately the same as levels indicated by WRAT scores for two pupils in reading, two pupils in spelling, and four pupils in arithmetic.

The Goodenough - Harris Drawing Test was used as a measure of intellectual maturity. The means of standard scores on pretest and posttest results for the previous six pupils are listed below.

Man		Woman		Self	
Oct.	May	Oct.	May	Oct.	May
86.7	89.8	74.2	88.3	83.0	91.0*

*One pupil refused to take this subtest in May.

A complete listing of all pupils' scores on the Goodenough - Harris Drawing Test can be found in Table 23, in Appendix B.

The classroom teachers were also asked to rate growth they had observed in positive changes in attitude. These are related in part to the previous results. The areas rated included changes in attitude toward self, school, and others. The frequency of teacher ratings are given in Table 4.67.

TABLE 4.67

FREQUENCY OF TEACHER RATINGS OF OBSERVED POSITIVE GROWTH IN ATTITUDES - EMOTIONALLY DISTURBED GRADES 3-4

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Positive change in attitude toward:				
a. Self	2	1	1	2
b. School	1	2	1	2
c. Others	1	2	1	2

In the listings of pretest and posttest means for the group on the Goodenough - Harris Drawing Test, there is an indicated gain for the group in all three areas. The largest indicated gain, 14.1, was made on the Woman subtest. According to teacher ratings in Table 4.67, only half of the pupils included in the results had moderate to much progress in attitudes toward self, school, or others.

Since the three standardized tests used have standard score means of 100 and a standard deviation of 15, these become useful in comparing directly each pupil's performance from one test to another. The standard scores for each pupil in this group are presented in Appendix B, Table 24. Forty-one pairs of standard scores are given in this table. Forty-one percent of these pairs show some indicated gain from pretest to posttest, thirty-nine percent show an indicated loss, and twenty percent indicated no difference in score.

During the previous year of operation, this classroom included a wide age and grade level. Progress of three of the pupils who had been in this classroom the previous year was available although not uniform for reporting purposes. One pupil who had been working on the fourth and fifth grade level the previous year was returned to regular class with his age group. His work as a seventh grader was reported and grade performance shows him earning a grade of D in five subjects and failing two subjects. Records show that the year prior to placement his grades were five C's and two D's. Standardized ability tests show him in the normal range but achievement test results were, for the most part, below the twentieth percentile.

Two other pupils were returned to regular classrooms in elementary schools. Information obtained concerning this year's performance shows that both maintained approximately the same grade performance as reported for the year prior to placement in this supplementary classroom. Achievement test results for the past year were reported and the composite score for these pupils was thirteenth percentile and sixteenth percentile respectively. Previous ability tests indicated both in the normal range.

Anecdotal records maintained by the classroom teacher indicate considerable interchange between pupils at various times during the year. Hyperactive and deviant behavior, both verbal and physical, was present but decreased slowly as the year passed.

End of the year staffing reports show that of the eight pupils assigned to the classroom during the year, the evaluative committee recommended that three pupils remain in the same classroom the coming year, three pupils return to their base school and the regular classroom programs, one pupil be assigned another type of Title III classroom, and that one pupil's placement be deferred pending a parent conference.

CLASSROOM SUPPORTIVE SERVICES

One of the objectives stated earlier was to improve the pupils' ability to express themselves in non-verbal areas. In addition to this the art consultant listed several more specific objectives including the following: using art as an appropriate avenue of expression, an emotional outlet, acceptance of reality, acceptance of others as well as themselves, increase development of eye-hand coordination, further development of fine and gross motor muscles, and development of better recall.

Projects presented during the year utilized various media such as clay, both oil and ceramic, tempera, crayon, colored chalk, colored tissue, copper-foil, burlap, and a variety of paper. Large individual murals using a circus as a basic theme was as near a group project as possible with this group. Most projects had to be assigned on an individual basis. The consultant reported only limited success with the projects and in reaching goals and objectives.

The art consultant also conducted a creativity study in this classroom. A complete description of the study was presented in an earlier part of this report. Part of the study consisted of presenting eight plates with predetermined marks on them. Each pupil was instructed to draw anything but they had to incorporate the mark provided in their drawing. The sets of eight plates were evaluated by the consultant on the basis of predetermined criteria. This procedure was conducted first in November, then again in April. Only three pupils were evaluated in November, and seven pupils in April. A summary of results is given in Table 4.68. No specific analysis of results is included at this time, but results should provide a base line for further investigation.

TABLE 4.68

POSSIBLE SCORES AND MEANS FOR
EVALUATION BY ART CONSULTANT

Possible score per set	40
Possible total score (2 sets)	80
Group mean (November)	24.7*
Group mean (April)	19.3*
Individual set mean	20.9

* Three pupils' results
* Seven pupils' results

Another objective stated earlier was to improve and further develop motor skills and coordination. The physical education consultant indicated further objectives: to establish peer and group behavior, to improve physical fitness, coordination, balance, and perceptual motor ability.

A twenty to twenty-five minute physical education period including a ten to twelve-minute warm-up period of calisthenics was utilized. Structured behavioral techniques were used to determine the other types of activities in which the pupils participated.

TABLE 4.69

RESULTS OF AAHPER YOUTH FITNESS TEST FOR EMOTIONALLY DISTURBED GRADES 3-4

Measure	Fall Test	Spring Test	Gain
Pull-ups (number)			
Mean	1.20	.43	-.77
Range	0-2	0-2	-2-0
Sit-ups (number)			
Mean	17.8	18.6	+.8
Range	4-25	7-38	4-13
Shuttle Run (seconds)			
Mean	15.5	14.8	-.7
Range	18.2-13.5	21.0-11.2	+2.8- -3.4
Standing Broad Jump (inches)			
Mean	43.4	47.3	+3.9
Range	36-47	39-53	5-9
50-Yard Dash (seconds)			
Mean	9.1	9.8	-.7
Range	10.5-8.4	11.4-8.6	+.2- -.3
Softball Throw (feet)			
Mean	68.0	45.7	-22.3
Range	50-90	27-70	-29- -2
600-Yard Run-Walk (minutes)			
Mean	3.98	3.84	-.14
Range	4.54-3.40	4.30-3.45	+.01- -.24

The American Association for Health, Physical Education, and Recreation Youth Fitness Test was used as a measure of physical fitness. The consultant administered the test in the fall and again in the spring. Results for the group are presented in Table 4.69.

Only three of the nine pupils assigned to this classroom participated in both tests. The mean scores were determined by the number participating in the test even though some pupils had only a fall score or only a spring score. A complete set of scores by individual pupils is presented in Appendix B, Table 25.

The physical education consultant also reported that the pupils appeared to be interested in physical activity and games but were unable to work together in organized game situations.

The objectives for this group instituted by the music consultant were to establish cooperative behavior, and to establish appropriate rhythmical behavior.

The consultant suggested a thirty-minute music period, divided into three ten-minute segments, be used with this group; the first segment utilizing something familiar to the pupils with success by all expected, the second ten-minutes involving new skills in a new activity, and the final segment being an activity which was highly reinforcing to the pupils. Inappropriate behavior in the first two segments resulted in the pupil being able to spend less time participating in the final segment. "Syncopated Coordination" from Educational Rhythmics for Mentally Handicapped Children was used initially to develop appropriate rhythmical behavior. Later, rhythm instruments were used for this purpose.

Little if any progress was reported in obtaining cooperative behavior from the group. All but two of the pupils were able to perform well in rhythm activities.

One pupil was selected from each classroom for further investigation. The selection was not made on a random basis but as a result of a joint effort between the center staff, the classroom teacher, and members of the Reasearch Division. The pupil selected from each classroom was not primarily representative of the type of pupil placed in that specific classroom, but the case study pupils were intended as representative types of handicaps within the supplementary classroom program. The following summary is for the pupil selected from the Emotionally Disturbed, Grades 3 - 4, classroom.

CASE STUDY SUMMARY

Background Information

Family Information

The subject was a male Caucasian born in June, 1958. He had two older siblings, one male and one female. In addition, he had one younger half-sibling, a female. The step-father, mother and children resided in a lower-middle-class neighborhood. The mother was divorced from the subject's natural father in 1958, remarried and divorced, and then married to her present husband in 1963. Much marital friction appeared present in the home, and the mother considered separation. The step-father apparently did not care much for the children and reportedly drank heavily. The subject saw a clinical psychologist regularly. Attempts were made to involve the entire family in therapy but these did not materialize.

Health History

During her pregnancy, the mother developed a kidney infection and could not work. Labor was induced and difficult, and the subject was born in the breech position. He had difficulty in breathing and was placed in an incubator. Supposedly he was first diagnosed as a "blue baby," and had a blood clot in his heart. When only a few months old he was hospitalized with asthma. Following this most of his time was spent in a tent with a vaporizer in use. At the age of two he contracted bronchial pneumonia twice.

The subject was bottle-fed, sat alone at five months, and walked with assistance at seven months. He walked alone at one year. Toilet training was started at this time, but was not successful. The subject was enuretic and occasionally soiled himself at the time of this writing.

As a young child the subject was a restless sleeper and did not eat well. In 1963 he fell from a trellis and contracted a severe skull fracture. Partial paralysis was reported by the mother to have occurred at this time, but cleared up in a week. Nosebleeds were frequent after the injury.

The subject reportedly had temper tantrums, tore things up, and was cruel to small animals, often maiming or killing them.

School Adjustment and Achievement

The subject was enrolled in kindergarten in 1963. He was a disturbing influence, wanting constant attention. He continually presented problems for school personnel. From June, 1963 through the summer of 1966 he was involved in larceny, destruction of property, shoplifting and burglary. He was usually involved in these with his older brother. During the summer of 1966 the subject was admitted to an area residential diagnostic and evaluative center. The school report from that institution indicated that he was a capable and likable child. His main deficit in the classroom was that he was in continual motion. He apparently did not resent authority and discipline, and made friends among his peers. Subsequent to the period of time spent in this facility, the subject returned home and was enrolled in the third grade of one of the public schools for the remainder of the

1966-67 school year. On February 3, 1967, it was necessary to exclude him from school due to extreme defiance, no respect for others, obscene language, and defacement of school and peer property. His teacher stated: "A most difficult child, retaliates to correction by spitting on the floor, stealing, stepping and stomping on other's fingers and toes, hitting in stomachs, and poking his fingers in classmates' eyes."

Referral, Evaluation, Recommendations and Placement

Referral

During May, 1966, the subject was referred to the Center by his school counselor. The referral was soon deactivated since the subject was being sent by local authorities to a residential diagnostic center. Upon request of the school counselor, however, the referral was reactivated in March, 1967, after the subject's dismissal from the public school. Center personnel including a staff school psychologist and staff social worker were assigned to the case. Because of the behavioral characteristics of the subject, request was made for placement in the classroom for emotionally disturbed children.

Evaluation

With parental permission, the staff school psychologist requested and obtained information from the residential diagnostic center the subject had attended and also from the local clinical psychologist who had seen the subject. Psychological and psychiatric reports indicated that the subject functioned intellectually within an average to bright average range. He was observed to have good organizational ability and adequate integrative ability. Reality testing was adequate. The subject, however, appeared to blame his asocial behavior on others or "something in my mind that makes me do it." It was believed that possibly this was some indication of depersonalization. It was further believed that the subject's environment was the primary cause of his problem. In summary, both the psychiatrist and psychologists viewed the boy as unhappy but healthy, with no gross pathology. It was recommended that the family obtain professional help as a group. An alternative recommendation consisted of placement of the subject in a foster home. Teacher evaluation and comments can be seen in the previous section of this summary.

Recommendations and Placement

The Diagnostic and Evaluative Admissions Committee of the Center had a staffing during September, 1967. Information was presented by personnel of the sending school. The Center staff members who had had direct contact with the subject and family shared their findings and information with the Committee. The following recommendations were made:

(1) Trial placement in the classroom for emotionally disturbed children.
(2) The staff social worker will stay in contact with the parents.
(3) The subject will remain in therapy with a local clinical psychologist.

As a result of the recommendations, the subject was placed in the classroom for emotionally disturbed children in September, 1967.

Objectives, Procedures and Results

Objectives

The main objectives centered around socialization: developing appropriate classroom behavior and appropriate relationships with peers and authority figures.

Procedures and Results

The classroom generally contained only six to eight pupils at one time. A major portion of the floor was carpeted, thus cutting down on classroom noise. Each pupil was provided an "office" or study carrel which aided in cutting out external stimuli. A "time-out" room was provided where children could be alone subsequent to a disturbing incident or when it was appropriate that they be away from the group. Instructions were given both in groups and/or individually. Specific assignments were given each pupil and required to be finished in a given amount of time. Failure to finish within that period of time resulted in a consequence, previously defined to the pupil. Expected social behavior in the classroom was clearly defined.

The subject appeared to respond very well in the special class setting. Teacher comments during the first two months of attendance consisted of: September 25-29 - "Was very well accepted by other boys;" October 9-13 - "Very well-behaved. Works well;" October 15-20 - "Good week. He's a good worker." "Good" comments about the subject's behavior far exceeded "bad" comments throughout the year. Staff members frequently asked, "Where is the bad little boy we've heard so much about?" "Bad" behavior consisted of inappropriate verbal remarks more frequently than inappropriate motor behavior (fighting, etc.)

Academically, the subject's progress was described by the teacher frequently as "good." Also accompanying this comment most of the time was "could do better" or "hurries too fast." The biggest problem for the subject in the academic area was "sticking with it." It was difficult for him to attend to a given thing for very long periods of time. This became more apparent toward the end of the year.

Psychological tests given in the spring were compared to those given the previous fall. Goodenough-Harris Drawing Test and Peabody Picture Vocabulary Test scores remained stable. On the Wide Range Achievement Test, the subject progressed from 4.1 to 4.8 in Reading, and from 3.6 to 3.9 in Arithmetic. His Spelling score remained the same.

Center staff consultants in art, music and physical education worked with the subject regularly. The resource consultant provided materials for the classroom and demonstrated their use to the teacher. Specific activities conducted by the consultants are described under the Classroom Supportive Services topic in this section.

The art consultant described the subject as alert, quick, and interested, with very creative ideas. Creativity and art concepts were rated as high average. It was believed that his self-concept improved during the year.

Comments made by the music consultant were similar to those of the art consultant. He was described as always able to do correctly, the first time, whatever was requested. Attention span was good as was rhythm and pitch discrimination. No behavior problems existed in the music area.

Progress was observed in physical education. Results of the Kraus Weber and AAHPER tests are presented in the following tables. Both tests were modified by the consultant (See Part 5 of this report).

TABLE 4.70

AAHPER FALL AND SPRING SCORES
CASE STUDY PUPIL
EMOTIONALLY DISTURBED, GRADES 3 - 4

Measures	Fall	Spring
Pull-Ups (number)	2	2
Sit-Ups (number)	25	31
Shuttle Run (seconds)	14.8	13.1
Standing Broad Jump (inches)	47	52
50 Yard Dash (seconds)	8.7	8.6
Softball Throw (feet)	89	60
600 Yard Run-Walk (minutes)	3.44	3.45

TABLE 4.71

KRAUS WEBER FALL, WINTER AND SPRING SCORES
CASE STUDY PUPIL
EMOTIONALLY DISTURBED, GRADES 3 - 4

	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Total
Fall	1	2	(.6)	(.7)	(.6)	(0)	3.9
Winter	1	2	3	(.9)	5	6	5.9
Spring	1	2	3	4	5	6	6.0

4.186

It would appear that the physical setting and climate of the classroom, the structure provided within the classroom, and the teacher and other personnel involved, successfully met the needs of the subject. The few instances of inappropriate behavior occurring in the classroom that occurred so frequently previously would seem to verify this. In addition, progress in most academic areas was seen. The school counselor believed that for the first time, the subject felt that his teacher and classmates liked him. In addition he was "starting over" at a new school where no one knew him or his reputation. It should be noted that this "good" behavior occured also in the classroom associated with the residential diagnostic center.

At a staffing held in May, 1968, it was believed by all present that the subject could function in a regular classroom under certain conditions. The following recommendations were made:

(1) An educational transfer must be made from the school initiating the referral to another school. The child must not begin school with a reputation of being a troublemaker.

(2) The subject must be placed in a fifth grade classroom with a strong, kind but firm teacher.

(3) The subject should continue treatment with a local clinical psychologist.

EMOTIONALLY DISTURBED
ELEMENTARY GRADES 5-6

One supplementary classroom was provided for pupils in the fifth or sixth grade who had emotional handicaps which prevented them from profiting from the regular instructional program even when supportive assistance was available. These pupils may be described as having any one or a combination of several of the following characteristics; excessive daydreaming, inappropriate emotional responses, intense fears, excessive withdrawal, hyperactivity, irresponsible social behavior, and perceptual disabilities.

OBJECTIVES

1. To improve personal and social adjustment, including self control, so that satisfactory contacts with environment can be made and reentry into regular programs can be effected.
2. To improve attitudes toward school and schoolwork.
3. To develop desirable study habits.
4. To enable children to achieve at levels appropriate to age, grade, and intelligence.
5. To discover and devise effective teaching techniques and superior instructional materials for emotionally disturbed pupils.

METHODS AND PROCEDURES

A curriculum which included the regular program of studies as well as special programs geared to the individual child were provided in the classroom for upper level elementary children with emotional problems. A wide variety of instructional materials, listed in an earlier part of this report was necessary to provide individual instruction at levels suited to each child. When necessary, study carrels were used to provide for individual study or to reduce external stimuli.

Instructional leadership was provided by a qualified classroom teacher. A part-time teacher aide, along with supportive assistance provided by the curriculum consultants in art, music, and physical education, reinforced the program of the teacher.

PUPILS PLACED IN CLASSROOM

Examination of pupil records maintained by the teacher and other school personnel yielded the following information about the pupils:

Age range at entrance: 10 years, 10 months to 12 years, 3 months.
Race: Ten Caucasians, one Negro.
Sex: All male.

A total of eleven pupils were placed in the classroom, six at the beginning of the year. Of the six pupils placed at the beginning of the year, one was transfered to a Title III Learning Disabilities classroom in November, one returned to the regular classroom at his base school in December, and two others returned to regular classrooms during March. The other two pupils remained in the supplementary classroom the entire school year. Another pupil was added to the classroom approximately one month after school began, but four months later moved out of state. The eighth and ninth pupils were added in November and December and remained in the class the rest of the year. The last two pupils were placed in February and March.

Attendance information indicates that while assigned to the supplementary classroom the pupils' attendance varied from a low of ninety-one percent to a high of ninety-eight percent. The mean attendance for those enrolled was ninety-six percent.

PUPIL RESULTS

The Peabody Picture Vocabulary Test was utilized as a pretest, posttest measure of verbal ability. Eight of the eleven pupils placed in the classroom had both pretest and posttest scores. Individual pupil results are presented in Appendix B, Table 26. Group results are given in the following table.

TABLE 4.72

PEABODY PICTURE VOCABULARY TEST RESULTS FOR EMOTIONALLY DISTURBED - GRADES 5-6

N = 8	October	May
Raw Score Mean	79.4	82
Raw Score Median	82.5	80
Raw Score Range	63-86	66-100
Standard Deviation	7.4	9.0
Standard Score Mean	92.8	93.6
Standard Score Median	97	92
Standard Score Range	68-102	69-119
Standard Deviation, Standard Score	10.9	13.3

Form A of the Peabody Picture Vocabulary Test was administered in October and Form B in May. As shown in Table 4.72, for those having both pretest and posttest scores, the mean raw score and mean standard score increased slightly while the median raw score and median standard score decreased slightly from pretest to posttest. Individual results shown in Appendix B shows eight pupils having both scores.

The Wide Range Achievement Test was used as a measure of basic skills in reading, spelling, and arithmetic. It was felt earlier that this could give a measure of academic progress. Complete results for individuals in the group are given in Table 27, in Appendix B. Results for eight pupils who had both pretest and posttest scores are summarized in the following table.

TABLE 4.73

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR EMOTIONALLY DISTURBED - Grades 5-6

N = 8	October	May
Reading Subtest		
G. E. Mean	3.6	4.4
G. E. Median	3.5	4.3
G. E. Range	1.9-5.5	2.0-7.3
Raw Score Mean	44.9	34.0
Raw Score Median	42	36
Raw Score Range	29-67	22-50
Spelling Subtest		
G. E. Mean	3.1	3.6
G. E. Median	3.7	3.5
G. E. Range	1.5-4.5	2.5-5.5
Raw Score Mean	26.6	13.0
Raw Score Median	28	12
Raw Score Range	10-40	7-30
Arithmetic Subtest		
G. E. Mean	3.5	5.1
G. E. Median	4.1	5.2
G. E. Range	2.9-4.7	2.9-6.7
Raw Score Mean	26	19.1
Raw Score Median	29	18
Raw Score Range	12-33	12-34

For the eight pupils in this group, the gains in mean grade equivalents were greater on the reading and arithmetic subtests than the gain on the spelling subtest. Another item of note is the apparent losses on all three subtests based on raw score means. This can be attributed to the change from Level I to Level II. The test is designed so that Level I is given to children ages 5 years, 0 months to 11 years, 11 months, and Level II is intended for persons aged 12 years or older. Six of the eight pupils used for data in Table 4.73 fell into the category of taking Level I as a pretest and Level II as a posttest.

The supplementary classroom teachers were asked to rate the progress of pupils in the academic areas of reading, spelling, and arithmetic. The frequency of the teacher ratings in this group are given in Table 4.74. Frequencies apply only to the previous eight pupils and not to the entire group.

TABLE 4.74

FREQUENCY OF TEACHER RATINGS IN READING,
SPELLING, AND ARITHMETIC - EMOTIONALLY DISTURBED GRADES 5-6

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Growth in:				
a. Reading	3	4	0	1
b. Spelling	2	3	3	0
c. Arithmetic	5	1	2	0

TABLE 4.75

FREQUENCY OF GAINS OR LOSSES IN G. E. ON WRAT SUBTESTS - EMOTIONALLY DISTURBED GRADES 5-6

Subtest	G. E. Gain			G. E. Loss
	2.0 or more	1.0-1.9	0-.9	
Reading	1	2	5	1
Spelling	0	2	4	2
Arithmetic	1	4	3	0

Table 4.75 shows the frequency of gains in yearly intervals or a loss in grade equivalent from pretest to posttest. The frequency of gains of one year or more reflected by this table explains why the greatest group gains, shown in Table 4.73, were made in reading and arithmetic.

A comparison can now be made between gains or losses in grade equivalents on the WRAT subtests and teacher ratings for each pupil in the areas of reading, spelling, and arithmetic. This comparison is shown in the following table.

5

TABLE 4.76

COMPARISON OF TEACHER RATING AND PUPIL GAIN OR LOSS IN G. E. ON THE WRAT - EMOTIONALLY DISTURBED GRADES 5-6

Teacher Rating					Totals
Much	0	1	2	7	10
Moderate	1	2	5	0	8
Slight	1	1	1	2	5
Little or None	0	1	0	0	1
Gain or Loss in G. E.	G. E. Loss	Gain 0-.4	Gain .5-.9	Gain 1.0-above	24

As indicated in Table 4.76, of twenty-four ratings given by the teacher in reading, spelling and arithmetic, fourteen rated as having moderate to much growth also had an indicated growth or gain in grade equivalent on a WRAT subtest of one-half a year to more than one year. In some cases the growth indicated by increase in grade equivalent was more than two years.

The Goodenough - Harris Drawing Test was utilized to obtain a measure of intellectual maturity. The means of standard scores on the pretest and posttest for the previous eight pupils are listed below.

Man		Woman		Self	
Oct.	May	Oct.	May	Oct.	May
83.3	87.1	76.6	81.6	80.4	85

Individual results on the above test can be found in Table 28, in Appendix B.

The classroom teachers were also asked to rate the growth they had observed in positive changes in attitude. These are related to some extent to the results on the previous subtests. Ratings were given in the areas of self, school, and others. Frequencies of these ratings are given in the table below.

TABLE 4.77

FREQUENCY OF TEACHER RATINGS OF OBSERVED POSITIVE GROWTH IN ATTITUDES - EMOTIONALLY DISTURBED GRADES 5-6

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Positive change in attitude toward:				
a. Self	5	1	1	1
b. School	3	3	2	0
c. Others	2	4	1	1

The listing of mean standard scores on the Goodenough - Harris Drawing Test shows a gain of four to five points from pretest to posttest. The teacher ratings show six of the eight pupils rated as having moderate to much growth observable in similar areas.

The three standardized tests used have standard score means of 100 and a standard deviation of 15. A comparison of each pupil's performance from one test to another can be made using standard scores.

The standard scores for each pupil in this group are presented in Appendix B, Table 29.

Limitations inherent in all testing situations apply to these results. Even though the same person administered both the pretest and the posttest, the sensitivity of the instruments to small changes limits any thorough analysis of these test results. A total of fifty-six pairs of scores can be observed in the table of pretest, posttest standard scores for all pupils. Of these pairs of scores, sixty-six percent show an indicated gain from pretest to posttest, thirty-two percent show an indicated loss, and two percent of the scores remained the same.

Five of the pupils in this group had been in the emotionally disturbed program the previous year. Three of the five returned to the regular classroom program during the past year. As determined by the evaluative committee at the end of the school year, it was recommended that the other two pupils return to their base schools for appropriate placement for the coming school year. Table 4.78 shows test results for these five pupils at various times during their placement in the emotionally disturbed or regular classroom.

TABLE 4.78

TEST RESULTS COMPARISONS FOR PUPILS
IN THE PROGRAM MORE THAN ONE YEAR

Pupil 1

WRAT

	May '67		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	---	---	5.4	87	6.6	93
Spelling	---	---	3.7	75	4.3	78
Arithmetic	3.9	85	3.9	77	5.3	84

GHDT

	May '67		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	90	25	80	9	87	19
Woman	89	23	78	7	86	18
Self	93	32	82	12	89	23

PPVT

May '67		Oct. '67		May '68	
S. S.	%ile	S. S.	%ile	S. S.	%ile
60	1	68	2	69	1

TABLE 4.78 (continued)

Pupil 2

WRAT

	May '67		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	4.4	88	4.7	86	7.3	101
Spelling	3.5	81	3.7	79	5.5	88
Arithmetic	4.7	90	4.7	86	6.3	94

GHDT

	May '67		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	78	7	69	2	75	5
Woman	76	5	66	1	74	4
Self	78	7	70	2	83	13

PPVT

May '67		Oct. '67		May '68	
S. S.	%ile	S. S.	%ile	S. S.	%ile
103	60	96	40	91	27

TABLE 4.78 (continued)

Pupil 3

WRAT

	Nov. '66		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	4.5	88	4.4	80	5.8	87
Spelling	3.5	81	3.7	75	4.6	80
Arithmetic	2.1	70	2.9	70	2.9	69

GHDT

	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	74	4	66	1	72	1
Woman	68	2	56	1	60	1
Self	72	3	57	1	66	1

PPVT

Nov. '66		Oct. '67		May '68	
S. S.	%ile	S. S.	%ile	S. S.	%ile
65	2	99	50	86	15

TABLE 4.78 (continued)

Pupil 4

WRAT

	Nov. '66		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	2.5	73	2.6	71	2.6	68
Spelling	2.5	73	2.3	69	3.0	71
Arithmetic	3.0	77	3.0	74	4.4	80

GHDT

	Nov. '66		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	70	2	73	4	72	3
Woman	67	1	73	4	64	1
Self	76	5	76	5	71	3

PPVT

Nov. '66		Oct. '67		May '68	
S. S.	%ile	S. S.	%ile	S. S.	%ile
83	13	83	11	90	22

TABLE 4.78 (continued)

Pupil 5

WRAT

	May '67		Oct. '67		May '68	
	G. E.	S. S.	G. E.	S. S.	G. E.	S. S.
Reading	1.9	68	1.9	66	2.4	66
Spelling	2.0	69	1.8	65	2.6	68
Arithmetic	4.2	86	4.2	83	6,1	92

GHDT

	May '67		Oct. '67		May '68	
	S. S.	%ile	S. S.	%ile	S. S.	%ile
Man	105	63	98	45	111	77
Woman	98	45	90	25	108	71
Self	98	45	94	34	116	86

PPVT

May '67		Oct. '67		May '68	
S. S.	%ile	S. S.	%ile	S. S.	%ile
101	57	98	45	100	58

In Table 4.78, pupils one, two, and five were returned to the regular classroom program during the past school year. The evaluative committee recommended that pupils three and four return to their base school for the coming school year.

Six pupils remained assigned to this classroom at the close of the year. End of the year staffing reports show that the evaluative committee made the following recommendations: two pupils were to be transferred to other Title III classrooms, one pupil was to seek private school placement, one case was postponed, and two pupils were to return to their base school for appropriate regular classroom placement.

CLASSROOM SUPPORTIVE SERVICES

In conjunction with other objectives for this class, the art consultant added the objectives of using the area of art as a means to gain in development of the self-concept, as a creative and accepted means of expression and communication, as an appropriate emotional outlet, and to reinforce learning in other academic subjects.

A wide variety of media was utilized and encouragement was given to combine and experiment with the media. Several different "exercises" such as painting to music were used both to motivate and relax the pupils.

The art consultant conducted an evaluative study with this group as well as five other supplementary classrooms. A description of the study was presented in the preceding part of this report. Only the results for this group will be presented here.

The study consisted generally of presenting each pupil with eight plates with predetermined marks on them which the pupils were to use as part of their drawing. The sets of eight plates were then evaluated by the art consultant on the basis of certain criteria. This was conducted on three different occasions during the year. Scores were available for six pupils in this group, with only two of these having scores for all three evaluations and two others having scores for two evaluations. A summary of the available scores is given below.

TABLE 4.79

POSSIBLE SCORES AND MEANS FOR EVALUATION BY ART CONSULTANT

Possible score per set	40
Possible total (3 sets)	120
Group November mean	19.5*
Group February mean	25.3**
Group April mean	23.2***
Individual set mean	23.3

* 2 scores used
** 4 scores used
*** 6 scores used

The art consultant indicated that most of the projects were successful in terms of the objectives set up for this group. Further investigation of usefulness of different approaches will be necessary to determine the effectiveness of a multi-media approach with the emotionally disturbed child.

4.204

The music consultant determined as objectives for this group the establishing of "cooperative" behavior in group music activities and presenting activities that could be used in leisure time at home.

A thirty-minute period divided into three equal parts was suggested. The first segment was to utilize something familiar to the pupils with success by all expected, the second segment involved new skills in a new activity, and the final segment included an activity which was highly reinforcing to the pupils. Inappropriate behavior in the first two segments resulted in the pupil being able to spend less time participating in the final segment. Activities included demonstration of basic guitar and ukelele chords and the correct way to play various rhythm instruments. At one point during the year, all pupils were attending a regular music class in the building in which the supplementary classroom was housed.

The consultant reported that little if any progress was made in reaching the objectives. Many pupils, however, did indicate an interest in music and music activities.

Objectives set forth by the physical education consultant were to improve peer or group behavior, and to improve overall physical fitness, coordination, balance, and perceptual motor ability.

A suggested twenty to twenty-five-minute physical education period was divided into a ten to twelve-minute warm-up or calisthenic period and the remaining time devoted to activities in which these pupils could succeed. Swinging, tumbling, and rope climbing were suggested for success activities. A new activity or one related to skills developed at the beginning of the year were suggested each week.

The American Association for Health, Physical Education and Recreation Youth Fitness Test was used as a measure of physical fitness. A table of individual scores for this group is given in Appendix B. Only one pupil in this group completed both the pretest in the fall and the posttest in the spring. The means and range for those completing the activity in the fall and spring are presented in the following table.

TABLE 4.80

RESULTS OF AAHPER YOUTH FITNESS TEST FOR
EMOTIONALLY DISTURBED GRADES 5-6

Measures	Fall Test	Spring Test
Pull-ups (number)		
Mean	0	2.5
Range	0-0	0-5
Sit-ups (number)		
Mean	16.8	53.0
Range	8-25	20-87
Shuttle Run (seconds)		
Mean	13.1	12.9
Range	16.3-11.5	16.0-9.8
Standing Broad Jump (inches)		
Mean	45.4	46.3
Range	26-57	39-60

TABLE 4.80
(continued)

50-Yard Dash (seconds)		
Mean	12.1	10.1
Range	15.5-10.1	13.5-8.2
Softball Throw (feet)		
Mean	56.4	73.6
Range	32-90	32-111
600-Yard Run-Walk (minutes)		
Mean	4.11	2.95
Range	7.00-2.40	5.39-2.00

Any improvement made in the various activities is probably not reflected in the above table. Different numbers of pupils were involved in various activities and different pupils were involved from the fall test to the spring test. It does reflect the ability of this group to perform. Since most of these pupils were eleven years of age, the spring mean scores would fall in the following percentiles based on national norms: pull-ups - 50%ile, sit-ups - 60%ile, shuttle run - 5%ile, standing broad jump - 5%ile, 50-yard dash - 1%ile, softball throw - 5%ile, 600-yard run-walk - 15%ile.

One pupil was selected from each classroom for further investigation. The selection was not made on a random basis but as the result of a joint effort between the center staff, the classroom teacher, and members of the Research Division. The pupil selected for each room was not primarily representative of the type of pupil placed in that specific classroom, but it was the staff's intention to make the case study pupils representative of the types of handicaps within the supplementary classroom program. The following summary is for the pupil selected from the Emotionally Disturbed, Grades 5 - 6, classroom.

CASE STUDY SUMMARY

Background Information

Family Information

The subject was a male Caucasian born in March, 1956. He had two older siblings, one male and one female. The family resided in a middle-class neighborhood. The father was a salesman for a local television station, and the mother was a housewife. Considerable friction was evident in the family with the parents providing little structure for the children and allowing themselves to be manipulated by them. The mother had an indicated drinking problem. All of the children had been seen either by a clinical psychologist or a psychiatrist.

Health History

The subject appeared to be in good health. He had been hospitalized just prior to the initiation of the referral because of "multiple complaints," all of which kept him from attending school.

School Adjustment and Achievement

The subject had attended one school prior to the initiation of the referral. His school problems appeared to center around his inability to respond to teacher requests and his fear of failure. According to teacher reports, taking "no" for an answer was completely foreign to the subject. He engaged in continual manipulation in order to obtain things he wanted. It was believed by school personnel that this same behavior occurred and was successful at home. The actual event precipitating the referral to the Diagnostic Center centered upon the subject being refused a change of teacher on the grounds that it was not a valid request. His emotional state was such that after being placed in another room at the request of his doctor, the subject was unable to cope with the situation seemingly due to fear of failure. He began to refuse to attend school.

Tests administered at the school indicated that the subject had average or above average intellectual ability.

Referral, Evaluation, Recommendations and Placement

Referral

During November, 1967, a referral form for the subject was processed by the Center. Consideration for placement in a classroom for emotionally disturbed children was requested. Center personnel including a staff school psychologist and staff social worker were assigned to the case.

Evaluation

With the parents' permission, the staff school psychologist requested information from the psychologist who had seen the subject previously. A report was received from him stating that he had been requested to see the subject when he (the subject) was hospitalized for "multiple complaints." The request was made by the family physician. Very little testing was done as it seemed obvious to the psychologist that the child was having a phobic reaction to school, and at the same time was very manipulative in his behavior. He believed, however, that the subject had normal intellectual ability. He also indicated that there was a great deal of conflict in the home.

Psychological testing was done by the staff school psychologist subsequent to the initiation of the referral. The Wide Range Achievement Test yielded scores of 5.5 in Reading, 4.5 in Spelling, and 4.7 in Arithmetic. A score of 102 was obtained on the Peabody Picture Vocabulary Test.

Recommendations and Placement

Due to the behavioral characteristics of the subject referred, a slightly different procedure was followed in placing this child in the special classroom. All Center personnel who had been assigned to the case shared their findings. It was recommended that the subject be placed in the room for emotionally disturbed children, that he be referred to a clinical psychologist for therapy, and that he be provided with a structured classroom program with clearly defined limits.

The clinical psychologist who had seen the subject previously was consulted on how placement of the child was to be effected. He advised that the child and his mother be seen simultaneously at the Center. During this meeting the coordinator was to very firmly inform the subject that he would be attending school the following week and that he was to attend with no argument. The advice was followed, with several other staff members who were to be engaged in working with the subject also seeing the boy and using the same technique. Since the subject reacted positively to this approach, he was congratulated on being approved for the classroom. The following Monday morning the coordinator received a phone call from the parents stating that the child was having a temper tantrum and refusing to go to school. The coordinator supported the parents explaining that the subject must be forced to go to school and failure to do so would simply result in the child manipulating successfully once again. The child was brought to the Center in his pajamas, dressed by the coordinator, and taken to school. The coordinator informed the subject that he must attend class every day. The subject was then advised that the coordinator would visit him on Friday afternoon. This occurred for three weeks after which the subject was attending school regularly. He continued to do so after the visits were discontinued. However, frequent advice and support was necessary for the parents in order to help them cope with the subject's attempts to manipulate.

Objectives, Procedures and Results

Objectives

The main objective was to provide the subject with a structured, defined environment which demanded specific patterns of behavior.

Procedures and Results

All assignments were made within the subject's ability range and were required to be finished at a specific time. Failure to finish them resulted in loss of recess or other valued activity. A point system was devised which allotted points for good behaviors.

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Maintenance of specific appropriate behaviors resulted in additional privileges. "Offices" or study carrels which reduced external stimuli were used.

The subject responded very well to the class program. A staffing held approximately two months after he was enrolled in the program produced the following remarks from the teacher: "_____'s reaction, behaviorwise, is very good. The program has taken a lot of pressure off of him. No trouble with him. Most of the problem seems to be at home and getting to school. Never tardy." The clinical psychologist reported: "Outside of a few minor episodes during the first week or two of school, this boy has stabilized and is very pleased with himself."

A staffing at the end of the year found the boy still progressing, but attempting to manipulate whenever he could. A suggestion by the teacher that he spend some time in the regular classroom produced anxiety and resentment in the subject.

Academically, the subject did quite well, approaching all subject areas with eagerness. Testing done prior to the end of the school year by the staff school psychologist produced scores of 5.6 in Reading, 4.0 in Spelling, and 6.7 in Arithmetic. These results showed slight improvement in Reading, moderate regression in Spelling, and a growth of two grades in Arithmetic as compared to scores obtained when the subject first entered the class. The Peabody Picture Vocabulary Test score of 119 was seventeen points higher than that of the previous one.

Consultants in art, music and physical education worked regularly with the subject. The resource consultant provided materials for the classroom and demonstrated their uses to the teacher.

Both the art and music consultants found the subject alert and highly successful in anything that he attempted in their areas. The physical education consultant stated that he (the subject) frequently attempted to get out of doing something unfamiliar to him by pretending to be ill. The subject was not enrolled in the class until December of the school year, and it was not possible, due to schedule conflicts, to give him the physical fitness tests. Specific activities conducted by the consultants are described under the Classroom Supportive Services topic in this section.

It appeared that the structured environment of the classroom successfully met the needs of the subject. Social behavior in the classroom was generally appropriate as compared to the behavior previously displayed in the sending school. A staffing held in May, 1968 resulted in the following recommendations:

(1) The Diagnostic Center would like to recommend that the parents seek other educational placement, possibly a private school where adequate treatment is available.

(2) If the first recommendation is not workable, the subject should remain in the classroom for emotionally disturbed children.

The first recommendation was made not because the Center Staff felt that the placement had been unsuccessful, but that it seemed that private placement, away from the home, might possibly be more successful. Both of the subject's siblings were to be out of the home during the 1968-69 school year, and it was believed that when the subject became the major "center of attraction" in the home the prognosis might not be promising. It also should be noted that the success achieved in the classroom was in large part due to continual support of the parents via telephone calls and interviews. Without this support it seemed very unlikely that the child would ever have arrived at the classroom. Though providing supportive services of this type are definitely a part of the duties of a facility such as the Diagnostic Center, the degree to which the service is performed might need to be questioned.

EDUCABLE MENTALLY HANDICAPPED, EMOTIONALLY DISTURBED AGES 9-11

An additional classroom was included in the supplementary program the past year. This classroom provided for pupils who exhibited emotional problems as well as low intellectual ability determined by individual testing. Children placed in this room were unable to benefit from instruction provided in the regular classroom or special classroom for educable mentally handicapped pupils. The low intellectual ability in addition to hyperactivity, intense fear, excessive withdrawal, inappropriate social behavior, and perceptual difficulties characterized the type of pupil placed in the classroom.

OBJECTIVES

1. To identify characteristics of children with severe learning difficulties and/or emotional problems.
2. To discover and devise teaching techniques and instructional materials to use with low ability disturbed children.
3. To design programs to improve the pupils' self-control to enable them to work in group activities.
4. To improve the pupils' ability to express themselves in non-verbal areas.
5. To develop desirable study habits.
6. To improve personal and social adjustment to enable the pupil to reenter regular or other special programs.

METHODS AND PROCEDURES

A qualified teacher provided the instructional leadership for the classroom. A part-time teacher aide along with supportive services provided by the curriculum consultants in art, music, and physical education assisted the instructor.

A wide variety of instructional materials, listed earlier in this report, was provided to allow for individual instruction at the level suited for the pupil. When necessary, study carrels were utilized to provide for individual study and to reduce external stimuli. Emphasis was placed on skill development in creative arts, music, and crafts. Materials and exercises to help alleviate perceptual difficulties were also utilized. Development of social skills and working with others was a functional part of the program.

PUPILS PLACED IN THE CLASSROOM

Examination of pupil records maintained by the teacher and other school personnel revealed the following information about the pupils:

Age range at entrance: 8 years, 2 months to 11 years, 10 months.
Race: Six Caucasian, two Negro.
Sex: All male.

A total of eight pupils were placed in the classroom during the year. Five were placed at the beginning of the year, one pupil was added in October and two more were placed in December. One pupil placed at the beginning of the year returned to a regular classroom in his base school the latter part of February. The primary reason for his return was poor attendance in the supplementary classroom.

Attendance records indicate that while assigned to the classroom the pupils' attendance varied from a low of forty-two percent to a high of ninety-five percent. The mean attendance for the group was seventy-eight percent.

PUPIL RESULTS

The Peabody Picture Vocabulary Test was used as a pretest, posttest measure of verbal ability. Five pupils in the group had both pretest and posttest scores. Results of the PPVT are presented for individual pupils in Appendix B, Table 31. Summarized results for five pupils are presented in the following table.

TABLE 4.81

PEABODY PICTURE VOCABULARY TEST RESULTS FOR EMOTIONALLY DISTURBED - EDUCABLE MENTALLY HANDICAPPED AGES 9-11

N = 5	October	May
Raw Score Mean	64.6	66.8
Raw Score Median	65	67
Raw Score Range	59-71	60-73
Standard Deviation	3.9	4.5
Standard Score Mean	80.6	79.4
Standard Score Median	74	74
Standard Score Range	71-100	73-90
Standard Deviation, Standard Score	10.7	7.1

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Form A of the Peabody Picture Vocabulary Test was used in October and Form B used in May. Table 4.81 shows for these five pupils a slight increase in the raw scores while the standard scores decreased very slightly.

TABLE 4.82

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR
EMOTIONALLY DISTURBED - EDUCABLE MENTALLY HANDICAPPED AGES 9-11

N = 5	October	May
Reading Subtest		
G. E. Mean	1.4	1.4
G. E. Median	1.9	1.9
G. E. Range	Kg. 2-2.5	Kg. 2-2.5
Raw Score Mean	29.2	29.4
Raw Score Median	37	36
Raw Score Range	10-45	10-46
Spelling Subtest		
G. E. Mean	1.3	1.6
G. E. Median	1.4	1.5
G. E. Range	Kg. 4-2.2	Kg. 9-2.3
Raw Score Mean	21.0	23.4
Raw Score Median	22	23
Raw Score Range	12-28	17-29
Arithmetic Subtest		
G. E. Mean	1.1	1.3
G. E. Median	Kg. 9	1.4
G. E. Range	N. 5-2.4	Kg. 1-2.4
Raw Score Mean	14.6	16.6
Raw Score Median	15	18
Raw Score Range	1-24	8-24

The Wide Range Achievement Test was used as a measure of basic skills in reading, spelling, and arithmetic. It was felt earlier that results would provide a measure of academic progress. Results for individual pupils are presented in Appendix B, Table 32. Results for the group are based on five pupils having scores on both the pretest and posttest.

Table 4.82 indicates, that using this test as a measure of growth for this small sample, little or no growth occurred between tests. On an individual basis the same results are evident. There are limitations in drawing conclusions from this small sample of exceptional children based on one set of test results.

The supplementary classroom teachers were asked to rate the growth or progress they had observed in the areas of reading, spelling, and arithmetic. The frequency of the teacher ratings for the same five pupils is shown in the following table.

TABLE 4.83
FREQUENCY OF TEACHER RATINGS IN READING, SPELLING, AND ARITHMETIC - EMOTIONALLY DISTURBED - EDUCABLE MENTALLY HANDICAPPED AGES 9-11

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Growth in:				
a. Reading	0	2	1	2
b. Spelling	0	2	1	2
c. Arithmetic	0	0	3	2

As shown by ratings in the above table, the teacher felt that only slight or little or no progress had been made in these areas. A comparison of these ratings and gain or lack of gain scores indicated by the WRAT subtests can now be shown.

TABLE 4.84

COMPARISON OF TEACHER RATING AND PUPIL GAIN OR LOSS IN G. E. ON THE WRAT - EMOTIONALLY DISTURBED - EDUCABLE MENTALLY HANDICAPPED AGES 9-11

Teacher Rating					Totals
Much	0	0	0	0	0
Moderate	1	2	1	0	4
Slight	0	5	0	0	5
Little or None	1	3	2	0	6
Gain or Loss in G. E.	G. E. Loss	Gain 0-.4	Gain .5-.9	Gain 1.0-1.4	15

The table above shows that nine of the fifteen ratings given by the teacher of little or none to slight progress also had indicated gains on the WRAT subtests of less than one-half year or a loss in grade equivalent.

The Goodenough - Harris Drawing Test was used to obtain a measure of intellectual maturity. The means of standard scores on the pretest and posttest for the previous five pupils are given below.

Man		Woman		Self	
Oct.	May	Oct.	May	Oct.	May
70.0	74.6	66.0	65.2	71.4	75.0

Classroom teachers were also asked to rate growth they had observed in positive changes in attitude. These are related to some extent to the previous results. The changes of attitudes were rated in the areas of self, school, and other. Frequencies of the teacher ratings are given in the following table.

TABLE 4.85

FREQUENCY OF TEACHER RATINGS OF OBSERVED POSITIVE GROWTH IN ATTITUDES - EMOTIONALLY DISTURBED - EDUCABLE MENTALLY HANDICAPPED AGES 9-11

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Positive change in attitude toward:				
a. Self	0	1	1	3
b. School	0	2	0	3
c. Others	0	0	2	3

In the listings of pretest and posttest means for the group on the Goodenough - Harris Drawing Test, there is an indicated gain for the group of 3.6 on the Self subtest. At the same time the teacher rated one pupil with moderate positive change, one pupil with a slight change, and three pupils with little or no change.

Since the three standardized tests used have standard score means of 100 and a standard deviation of 15, these become useful in comparing directly each pupil's performance from one test to another. The standard scores for each pupil in this group are presented in Table 34, found in Appendix B.

Limitations inherent in testing situations apply to these results. Even though the same person administered both the pretest and the posttest, the sensitivity of the instruments to small changes limits any thorough analysis of test results at this time. Table 34 in Appendix B shows that of thirty-five pairs of pretest and posttest scores, some indicated gain was shown in twelve pairs, while seventeen pairs show an indicated loss, and six pairs give an indication of no difference in score.

Since this was the first year of operation for the classroom, and only one pupil was returned to the regular classroom in February due to attendance problems, insufficient time has elapsed to determine the effectiveness of the program and the progress pupils have made as a result of the classroom program.

End of the year staffing reports, for the seven pupils assigned to the class at that time, show that the evaluative committee made the following recommendations: two pupils to remain in the classroom for the next school year, one pupil transferred to another Title III classroom, three pupils transferred to their base school special education program, and one pupil to be returned to his base school and regular program.

CLASSROOM SUPPORTIVE SERVICES

One objective for the classroom was to improve the pupils' ability to express themselves in non-verbal areas. The art consultant indicated additional objectives which included the following: to enable the pupils to use the area of art as an appropriate means of expression, as an emotional outlet, to better the self-concept, and to develop acceptance of others as well as themselves.

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A variety of media, projects, and motivation were used in the classroom. One example of a project was using the story "The Five Chinese Brothers" as motivation. Each pupil first made a drawing of his impression of a given brother. The drawings were then transferred to ceramic clay tiles and modeled in relief, fired, and printed with acrylic paints. The tiles were then mounted individually and remounted on walnut plywood for display. The consultant indicated that the objectives were realized and the projects in the class were successful.

The classroom was included in the art consultant's creativity evaluation study which is described in greater detail in another section of this report. Briefly, the study consisted of presenting each pupil eight plates with predetermined marks on them which he was asked to include as part of his drawing. The sets of eight plates were evaluated by the art consultant on the basis of certain criteria. This procedure was followed three times during the year. Complete results were available for four pupils in the classroom. A summary is given in the following table. No further analysis was done at point, but scores should provide a base line for further investigation.

TABLE 4.86

POSSIBLE SCORES AND MEANS FOR EVALUATIONS BY ART CONSULTANT

Possible score per set	40
Possible total (3 sets)	120
Group November mean	21.5
Group February mean	10.3
Group April mean	18.8
Individual set mean	16.8

The music consultant's objectives for this group were to improve rhythmical behavior, and to establish success in and a "liking" for music activities.

Initial activities included simple circle games and action songs which were imitative in nature. Ukeleles were presented with colored tape on the frets to indicate finger placement. "Syncopated Coordination" from Educational Rhythmics for Mentally Handicapped Children by Ferris and Jenet Robbins was utilized to improve rhythmical behavior. The teacher requested that "Threshold to Music" by Mary Helen Richards be used.

At the beginning of the year the consultant observed an apparent interest in music activities on the part of the pupils. Later, it was noted that behavior problems, such as "backtalk" and refusal to participate and/or cooperate with each other, was more prevalent. Little progress was observed in all areas of music.

The physical education consultant had objectives for this group which included the improvement of overall physical fitness, coordination, endurance, balance, and perceptual motor ability. A daily period of twenty to twenty-five minutes was suggested to include a ten to twelve-minute warm-up or calisthenic period, and the remaining time spent in activities in which the pupils had opportunities for easy success. The teacher suggested that the calisthenics be conducted to music.

The American Association for Health, Physical Education and Recreation Youth Fitness Test was used as a measure of progress in the physical fitness area. Four pupils were tested in the fall and six pupils had all or part of the test in the spring. The results presented here are for the number of pupils taking the test at the time it was administered. The particular number of pupils per subtest is not indicated and varies from four to six. Only two pupils had complete results on all subtests.

TABLE 4.87

RESULTS OF AAHPER YOUTH FITNESS TEST FOR
EMOTIONALLY DISTURBED - EDUCABLE MENTALLY HANDICAPPED AGES 9-11

Measure	Fall Test	Spring Test	Gain
Pull-ups (number)			
Mean	.25	1.17	+.92
Range	0-1	0-4	----
Sit-ups (number)			
Mean	4.8	23.2	+18.4
Range	0-12	10-44	7-8
Shuttle Run (seconds)			
Mean	15.9	14.3	-1.6
Range	20.0-13.3	18.0-11.1	-2- -2.7
Standing Broad Jump (inches)			
Mean	26	31.5	+5.5
Range	17.43	21-46	-1-16
50-Yard Dash (seconds)			
Mean	14.0	11.6	-2.4
Range	16.0-10-8	14.2-9.4	-1.4- -1.8
Softball Throw (feet)			
Mean	47.8	49.3	+1.5
Range	15-82	30-60	13-15
600-Yard Run-Walk (minutes)			
Mean	3.99	3.87	-.12
Range	6.18-3.30	4.18-3.46	-.83- -2.15

Individual results for the pupils in this group taking the AAHPER Youth Fitness Test are given in Table 35, Appendix B. Improvement made on the various subtests can be related only to the two pupils who had both tests. Both of these did not show improvement in the number of pull-ups performed and one of the pupils failed to jump as far in the spring as he did in the fall. On all other subtests, both had an indicated gain.

The physical education consultant reported interest and participation as being good at the beginning of the year. Behavior problems, lack of interest, and refusal to participate became more and more prevalent as the year passed.

One pupil was selected from each classroom for further investigation. The selection was not made on a random basis but as the result of a joint effort between the center staff, the classroom teacher, and members of the Research Division. The pupil selected for each room was not primarily representative of the type of pupil placed in that specific classroom, but it was the staff's intention to make the case study pupils representative of the types of handicaps within the supplementary classroom program. The following summary is for the pupil selected from the classroom for Emotionally Disturbed, Educable Mentally Handicapped, Ages 9-11.

CASE STUDY SUMMARY

Background Information

Family Information

The subject was a male Caucasian born in July, 1958. He was the only child of two rather unstable parents. The father was unemployed at the time of this writing. The mother, in the past, had been hospitalized for psychiatric treatment. The family resided in a lower-middle-class neighborhood.

Health History

Medical reports stated that the subject was born prematurely weighing four pounds and four ounces. At four days of age he became jaundiced. Bilirubin at this time was twenty-six milligrams. An exchange transfusion was done. He was in the hospital thirty days and was discharged weighing five pounds and five ounces. At ten months of age, it was obvious that he was not progressing normally. He could not sit. He had only learned to hold his head well at eight months. When two years of age, he was having temper tantrums, breath-holding spells, and refusing to sleep at night. He began to walk at the age of three and had approximately a twelve to twenty-word vocabulary. At five years of age, he could walk with an unsteady gait, but had difficulty in running. He was still clumsy in walking and running at the age of six, but was improving slowly. Temper tantrums and "driven" behavior were noticed by parents and school personnel. The family physician believed that the subject had brain damage as a result of premature birth and hyperbilirubinemia. After the subject began school, he saw a clinical psychologist regularly.

School Adjustment and Achievement

The subject began kindergarten at five years of age. His behavior was such that he could not be maintained in the class. After a year out of school he was placed in a special first grade class. There he made satisfactory progress for short periods. Attendance was limited to half-days because of his inability to control his behavior. The following year he was placed in a room for educable mentally retarded children at another school. His academic behavior appeared to be on a higher level than that of his peers. Socially, he was often hostile and aggressive and could not have participated in a regular class setting. School personnel believed that his emotional problem was more apparent than his neurological problem, and that placement in a classroom for emotionally disturbed children would be more appropriate.

Referral, Evaluation, Recommendations and Placement

Referral

During May, 1967, a referral form for the subject was processed by the Center. Because of behavioral characteristics, consideration for placement in the classroom for educable mentally handicapped children who were also emotionally disturbed was requested. Center personnel including a staff school psychologist and staff social worker were assigned to the case.

Evaluation

With parental permission, the staff school psychologist requested and obtained information from the clinical psychologist and medical doctor who had seen the subject. The clinical psychologist furnished the results of testing done in April, 1967. Scores obtained on the Wide Range Achievement Test were 2.1 in Reading, 2.0 in Spelling, and 2.2 in Arithmetic. The Wechsler Intelligence Scale for Children revealed a verbal IQ of 105, a performance IQ of 64 and a full scale IQ of 84. In addition, it was stated that the Bender-Gestalt showed indications of a central nervous system disorder. It was recommended by the psychologist that the subject be placed in a classroom for emotionally disturbed children on a trial basis.

Information received from the medical doctor is related in the Health History section of this summary.

Recommendations and Placement

The Diagnostic and Evaluative Admissions Committee of the Center had a staffing in September, 1967. Information was presented by the sending school. Center personnel who had had direct contact with the subject and family shared their findings and information with the Committee. The following recommendations were made:

(1) Trial placement in the classroom for emotionally disturbed and educable mentally retarded children.

(2) The social worker assigned to the case should stay in contact with the family.

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As a result of these recommendations the subject was placed in the classroom for ED-EMH children.

Objectives, Procedures and Results

Objectives

An attempt was made to improve sensory-motor development and basic learning skills. Visual-perceptual training and language training were also provided. In addition attempts were made to develop appropriate social behavior.

Procedures and Results

Materials used in the classroom included the Frostig Program of Visual Perception, Sullivan Associates Programmed Reading Series (Pre-Reader and Series I), and Color-Factor Math - Grade 1 (McGraw-Hill Co.). Manual directions were followed.

Growth approximated in the area of visual-perception was measured by the Frostig Test which was given in the fall and spring of the school year. Results can be seen in the following table:

TABLE 4.88

PERCEPTUAL AGE EQUIVALENTS AS MEASURED BY THE FROSTIG TEST
CASE STUDY PUPIL
EMOTIONALLY DISTURBED, EDUCABLE MENTALLY HANDICAPPED, AGES 9-11

	VM	FG	CS	PS	SR
Fall	5-9	5-9	6-9	8-9	6-6
Spring	7-0	8-3	9-0	8-9	6-6

The teacher used the Botel Reading Inventory as a means of measuring the success of the Sullivan Programmed Reading Series. Tests again were given in the spring and fall of the school year. Results of that testing can be seen in the following table:

TABLE 4.89

PERCENT OF ACCURACY AS MEASURED BY THE BOTEL READING INVENTORY
CASE STUDY PUPIL
EMOTIONALLY DISTURBED - EDUCABLE MENTALLY HANDICAPPED, AGES 9-11

	WORD RECOGNITION							COMPREHENSION				
	P.P.	P	L	2^1	2^2	3^1	3^2	1	2^1	2^2	3^1	3^2
Fall	85	90	70	40	—	—	—	80	60	30	—	—
Spring	80	80	85	60	45	—	—	80	60	80	40	—

A sub-test of the California Achievement Test (Computation Skills) was used by the teacher to measure growth made in mathematics as result of the use of the Color-Factor Math Program. The following results were obtained:

TABLE 4.90

GRADE EQUIVALENTS AS MEASURED BY THE
CALIFORNIA ACHIEVEMENT TEST
CASE STUDY PUPIL
EMOTIONALLY DISTURBED - EDUCABLE MENTALLY HANDICAPPED, AGE 9-11

	ADDITION	SUBTRACTION	MULTIPLICATION	DIVISION
Fall	3.0	2.0	2.3	Not scored
Spring	3.4	2.8	1.3	Not scored

Psychological testing was conducted in the spring and in the fall by the staff school psychologist . On the Wide Range Achievement Test the subject progressed from 2.3 to 2.5 in Reading, 1.5 to 2.2 in Spelling, and from Kg. 9 to 2.1 in Arithmetic. The Peabody Picture Vocabulary Test results showed little variation.

A behavior modification program was devised by the teacher. Rules, made by the pupils, were recorded and posted near each pupil's desk. Infraction of any of the rules resulted in a mark recorded on his sheet next to the rule "broken." The child having the fewest infractions at the end of the week was able to be the leader in all classroom activities the following week. Though this procedure appeared to effect some change in the subject's behavior initially, results were maintained for only a short period of time.

Staff consultants for art, music and physical education saw the subject on a scheduled basis. The resource consultant provided materials for the classroom and demonstrated their use to the teacher. Specific activities conducted by the consultants are described under the Classroom Supportive Services topic of this section.

The art consultant believed that the subject became increasingly more difficult to motivate as the year progressed. She also felt he had regressed in creativity and art drawing concepts. His self-concept drawings reportedly improved.

The music consultant found the subject increasingly difficult to maintain in group activities as the year progressed due to inappropriate behavior. Initially he was able to discriminate between high and low and acquired new material readily. Rhythm instruments were handled well. Rhythmical activities involving only the movement of the body parts however, were very difficult for him. Very little progress was made throughout the year.

In the area of physical education, the subject appeared to make considerable progress. In the fall and spring, the consultant administered an AAHPER and a modified Kraus Weber Test to the subject (See Section 5). Results of the tests are given in the following tables:

TABLE 4.91

AAHPER FALL AND SPRING SCORES
CASE STUDY PUPIL
EMOTIONALLY DISTURBED - EDUCABLE MENTALLY HANDICAPPED, AGES 9-11

Measures	Fall	Spring
Pull-ups (number)	0	0
Sit-ups (number)	4	12
Shuttle Run (seconds)	20	18
Standing Broad Jump (inches)	19	35
50-Yard Dash (seconds)	16	14.2
Softball Throw (feet)	15	30
600-Yard Run-Walk (minutes)	4:29	3:46

TABLE 4.92

KRAUS WEBER FALL, WINTER AND SPRING SCORES
CASE STUDY PUPIL
EMOTIONALLY DISTURBED - EDUCABLE MENTALLY HANDICAPPED, AGES 9-11

	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Total
Fall	(.25)	(0)	(0)	(0)	(0)	(0)	.25
Winter	1	(.25)	(.4)	(.5)	5	(0)	3.15
Spring	1	2	(.2)	4	5	(0)	4.20

4.236

At the end of the year it appeared that the subject had made some growth in academic skills. Social adjustment and general classroom behavior appeared to need much modification according to anecdotal records kept by the teacher, and other personnel working with the subject. The fact that academic growth occurred in spite of excessive behavior problems might have resulted because of individual instruction. Much of the classroom instruction was given on a one-to-one basis. Personnel working with the subject reported that on a one-to-one basis, the subject behaved quite appropriately. Since the subject showed some evidence of benefiting from the placement, it was recommended at the May, 1968 staffing that he remain in the classroom during the 1968-69 school year for at least nine weeks, at which time a review staffing would be held. In addition, the teacher was to stay in close contact with the clinical psychologist, the main objective being to attempt to change the social behavior of the subject.

EMOTIONALLY DISTURBED - JUNIOR HIGH

A classroom for emotionally disturbed children of junior high age was provided for children who had emotional handicaps severe enough that they were unable to benefit from regular classroom instruction. These children exhibited one or a combination of several characteristics such as the following: hyperactive, intense fears, excessive withdrawal, irresponsible social behavior, and perceptual difficulties.

OBJECTIVES

1. To enable children to improve basic skills and develop desirable study habits.
2. To encourage children to express themselves in non-verbal ways.
3. To motivate children to work in group situations.
4. To improve the child's self-image and attitude toward school and school work.
5. To enable children to achieve at levels appropriate to age and intelligence in order to effect re-entry into the regular classroom.
6. To discover and devise effective teaching techniques and instructional materials for emotionally disturbed children.

METHODS AND PROCEDURES

The classroom for children with emotional problems provided a curriculum which included the regular program of studies as well as special programs geared to the individual child. A wide variety of instructional materials was necessary to provide individual instruction at the level suited for the pupil. When necessary, study carrels were utilized to provide for individual study and reduction of outside stimuli.

Staffing problems resulted in not having the same qualified teacher all year in this classroom. During the first four weeks and the following two weeks, two different qualified teachers served the junior high classroom. Difficulty in engaging another qualified full time teacher culminated in using a qualified substitute teacher the remaining twelve weeks of the first semester. A qualified instructor was provided for the entire second semester. Supportive services were provided by the coordinator of psychologically handicapped pupils, the staff school psychologists, and curriculum consultants in art, music, and physical education.

PUPILS PLACED IN CLASSROOM

Individual pupil records reveal the following information about the pupils:

Age range at entrance: 12 years, 3 months to 15 years, 5 mo.

Sex: Seven males

Race: All caucasian

Three pupils were placed at the beginning of the year. Of these, one pupil progressed sufficiently to be placed back into regular classes in October, the second was admitted to a mental institution in November, and the third remained assigned to the classroom the entire school year. The fourth pupil was placed in November and remained throughout the year. A fifth pupil, placed one month later, also remained throughout the year.

The sixth pupil, placed in February, was admitted to a mental institution one month later. The last pupil, placed in March, remained until the end of the school year.

Attendance records show that attendance varies from seventy-eight percent to ninety-eight percent for individual pupils. One of the pupils attended the special class only one or two hours per day the entire year.

PUPIL RESULTS

With difficulties arising from teacher staffing problems, test score results are limited in number. Only two pupils were tested pre and post on the three instruments selected. Three others were tested in the spring yielding posttest results only. Standard score results for those tested are shown in Appendix B, Table 36 . Because of the small number with both pretest and posttest results on all three measures, means, deviations, and ranges are not reported. Interpretation is not feasible on a group basis.

Teachers in all the supplementary classrooms were asked to rate pupil progress in various areas at the conclusion of the school year. The frequency of teacher ratings are given in Table 37 in Appendix B. The frequency of a rating of moderate or much growth in academic areas is considerably less than the frequency of similar ratings in the skill areas. It would seem apparent, at least from the teacher point of view that some positive change has occurred in attitudes.

Anecdotal records, samples of classwork, reports to parents, mid-year and end of year staffing reports were examined. Staffing reports include findings and recommendations of the special classroom teacher and the building principal and/or counselor of the school where the classroom is located, the curriculum consultants in art, music, and physical education, a psychologist, a social worker, and the coordinator of psychologically handicapped children. Based on information reported from the above sources, indications are given of the severity of some disturbed children of this age level. Progress has been made in two cases in terms of attitudinal changes. Limited abilities in some cases, and indications of severe emotional overlays in other cases make the task of interpretation difficult.

The one pupil, who returned to regular classes in October, was reported at the end of year as passing five of seven subjects in his base school. During the previous year this pupil was reportedly working at fourth and fifth grade level in a Title III emotionally disturbed classroom. Another measure, namely standardized test results from the pupil's base school indicate approximately the same score pattern as exhibited three years before being placed in a special classroom.

According to end of year staffing reports of the four pupils in the class at that time, one was recommended to receive further evaluation at a state operated receiving home, another recommended for placement in a state mental institution, the third recommended for private school placement, and the fourth recommended for placement in the Title III learning disabilities room for the 1968-69 school year.

One pupil was selected from each classroom for further investigation. The selection was not made on a random basis but as the result of a joint effort between the center staff, the classroom teacher, and members of the Research Division. The pupil selected for each room was not primarily representative of the type of pupil placed in that specific classroom, but the intention was to make the case study pupils representative of the types of handicaps within the supplementary classroom program. The following summary is for the pupil selected from the classroom for Emotionally Disturbed, Educable Mentally Handicapped junior high school children.

CASE STUDY SUMMARY

Background Information

Family Information

The subject was a male Caucasian born in February, 1955. He had two older half-siblings, one male and one female, and one younger female sibling. The family resided in a middle-class neighborhood. The father was employed as a dry wall finisher, and the mother was a grocery store checker. Some friction between the parents was apparent, with the mother talking of divorce.

Health History

The subject was born one month prematurely and placed in an incubator for three weeks. He progressed through the developmental stages slowly. Sitting up alone first took place at the age of seven months, and walking alone was accomplished at the age of seventeen months. Toilet training was accomplished at the age of three years.

Early behavior, prior to school entry, was characterized by impulsiveness, restlessness, nervousness, and hyperactivity. A serious fall from a ladder during the spring of 1960 caused the subject to remain in a coma for two days, but he soon recovered. No other serious illnesses, accidents, or operations were reported.

During his seventh year the subject was referred to a children's clinic. The diagnosis included dull normal intelligence, organic brain involvement, and emotional problems. An EEG revealed positive findings.

School Adjustment and Achievement

The subject had a history of school difficulties since beginning in school. While in an adjoining state, the family was referred to a children's evaluation clinic because of the subject's restlessness, impulsive and destructive behavior, temper outbursts, etc. More recent references to the subject described him as a constant source of irritation for teachers and children. Behavior was characterized by many outbursts, difficulty in adjusting to routine, distracting others, etc.

The subject enjoyed reading in school and read a great deal. Written assignments were, however, seldom completed. Personnel from the referral school were of the opinion that he had high average ability. A Stanford-Binet administered in May, 1966, yielded an I. Q. score of 111. Iowa Tests of Basic Skills results showed above average performance at the beginning of Grade 5, and above average performance at the beginning of Grade 6.

Referral, Evaluation and Placement

Referral

During February, 1967, a referral form for the subject was processed by the Center. Because of behavioral aspects, a diagnostic evaluation was recommended, and consideration for placement in a classroom for emotionally disturbed children was requested. Center personnel including a staff school psychologist and a staff social worker were assigned to the case. The subject was referred by the Center to a medical doctor for a physical examination and to a psychiatrist for a psychological evaluation.

Evaluation

A physical examination in March, 1967 revealed no physical anomolies. With the parents' permission a staff school psychologist requested information from the clinic where the subject had been evaluated previously. A psychological evaluation was furnished by the local psychiatrist. The evaluation indicated that the subject was hyperalert, responsive, and intolerant of frustration. A motor performance impairment was noted. Conflictual concerns seemed to domnate his thinking. Intellectual superiority was indicated. In summary the evaluation produced a diagnosis of borderline psychotic disturbance. Recommendations that the parents seek family consultation services and that the subject receive outpatient psychotherapy were made.

Recommendations and Placement

The Diagnostic and Evaluative Admissions Committee of the Center had a staffing during September, 1967. Information was presented by personnel of the sending school. The Center staff members who had had direct contact with the subject and family shared their findings and information with the Committee. The case was discussed in detail and the following recommendations were made:

(1) Trial placement in the junior high school classroom for emotionally disturbed children.

(2) Continued contact with the parents by the staff social

worker assigned to the case.

(3) Instruction more therapeutically than academically oriented.

As a result of the recommendations, the subject was placed in the junior high school classroom for emotionally disturbed children for the 1967-68 school year.

Objectives, Procedures and Results

Objectives

Attempts were made to provide a predictable, structured environment, to develop appropriate relationships with peers and adults, and to improve independent functioning.

Procedures

The classroom for emotionally disturbed children of junior high school age was organized so that the pupils would spend part of their school day in the special classroom and part of the day in regular classes. The amount of time spent in regular classes was dependent upon an individual pupil's ability to profit from large group instruction and the need for individual attention in the special classroom setting.

Because of the subject's psychological needs and severe behavioral problems, he was scheduled into the special classroom for the full day during the first part of the school year.

"Offices" or study carrels were provided to aid in eliminating external stimuli. Most instruction was done on an individual basis. The daily schedule of classroom activities rarely varied from day to day.

At the beginning of the year the subject was reported to be very withdrawn, and somewhat hyperactive and disorganized. Little goal-oriented behavior was observed. His attention was first on one thing and then another. He frequently appeared to have visual hallucinations. He was able to complete very little academic work. This behavior was in evidence for the first six weeks of the school year. During this time two different teachers supervised the classroom.

In the seventh week of the school year a third teacher began to supervise the classroom. This teacher adopted an attitude of kind firmess toward the subject and developed very good rapport with him. When the subject appeared to be hallucinating the teacher immediately attempted to focus his attention on the immediate environment by talking to him about something in the room or something he had recently done. The teacher spent many periods during the day in general conversation with the subject. Little emphasis was placed on academics for several weeks. Gradually, however, the teacher began making "chatting" contingent on a certain amount of school work being done. At first the subject needed much encouragement to work independently, but gradually became able to sit quietly and do his assignments. As he was able to complete more work independently in the special classroom, plans for phasing him into parts of the regular classroom program were formulated. He began to attend regular physical education and music classes. Before the second semester began he was also attending regular English and mathematics classes. Hallucinations appeared to have stopped.

At the start of the second semester a new teacher was responsible for supervising the classroom. Some regression in behavior occurred. It was reported that the subject did not complete his assignments, was somewhat hyperactive, and frequently "tested" the new teacher. This behavior decreased however as the subject became better acquainted with the teacher.

Teachers in the regular classrooms the subject attended indicated that he had made a great deal of progress but still had some difficulty getting assignments in on time. Peer relationships were reported to be quite good.

As the year came to an end, the subject became increasingly concerned about where he would attend school the next year, who his teacher would be, etc. Some of the behaviors that were observed at the beginning of the year were again observed on occasion.

Center staff consultants in art and music worked with the subject on a regular basis. The physical education consultant did not see him due to schedule conflicts. The resource consultant provided the classroom with various materials and demonstrated their use to the teachers.

The art consultant stated that the subject's creativeness was in the high average norm. She also stated that his art drawing concepts were primitive and that most of the time he showed no interest in art. There was no organization of thought in his approach to an art project.

The first time the music consultant visited the subject she took along a guitar, sat down beside him, and began to play a familiar folk song. The subject displayed immediate interest in learning more about the instrument. He was shown some basic chords and given several folk songs to work on. The consultant reported that he "picked up" new material very rapidly, had excellent pitch discrimination, and a high, but pleasant voice. His approach in learning the guitar was very rapid and somewhat disorganized. He was rather reluctant to accept any help. However, when he found he could not make progress without some help he began to accept the consultant's structuring of each session. In February the consultant was asked if a pupil could provide some entertainment for the meeting of a local professional group. When the subject was approached concerning this, he assented quickly and immediately began to plan the format of his "program." No observable anxiety was expressed. When the time came to play for the group he responded very appropriately, seemingly enjoying himself immensely. At the end of the year the consultant believed that he had made extraordinary progress both in his ability with the guitar and in increased self-confidence.

A staffing was held in May, 1968. All Center staff members who had worked with the subject believed that he had made tremendous progress during the year. However, it was believed that it was too soon to expect any stability in his behavior due to the fact that he was a very disturbed young boy with the disturbance being of long duration. Continued psychological treatment and special education placement was deemed necessary in planning the subject's future. Temporary placement in a residential treatment center was considered not a remote possibility. Since it was possible that the classroom would not be in operation during the 1968-69 school year, it was recommended that the subject be placed in the secondary school age classroom for children with learning disabilities for the 1968-69 school year.

4.250

EXPERIMENTAL CLASSROOM FOR NEGRO UNDERACHIEVERS GRADE 6

An experimental classroom was established for the purpose of providing a program to discover and attempt to remedy the underlying causes of Negro underachievement. This classroom served sixth grade pupils in a building having a predominant Negro population.

The intent of the program was to search for symptoms which brought about underachievement. When symptoms were identified, then plans could be formulated to mitigate these symptoms in order to facilitate the pupils' achievement in their regular classwork.

OBJECTIVES

1. To identify the characteristics of Negro underachievement in the Wichita area.
2. To discover causes that bring about these characteristics.
3. To develop techniques to enable teachers or persons dealing with Negro underachievers to remedy the causes of underachievement.
4. To enable a change in behavior to occur in a positive direction.
5. To alleviate external pressure in order to promote internal motivation.
6. To improve the pupils' sense of responsibility.

METHODS AND PROCEDURES

Pupils selected for placement in the experimental classroom were taken from the regular sixth grade classrooms in the same building. Scheduling of pupils was the responsibility of the building principal. The pupils were scheduled so that they did not miss their regular reading or arithmetic periods in the regular classroom.

Pupils selected for this classroom met the following criteria:

1. A score of 95 or above on an individual intelligence test.
2. One year or more below grade level on the ITBS test results.
3. Should not show the characteristics of being emotionally disturbed.
4. Should not be a school discipline problem.
5. Should be placed in the experimental room for the entire school year unless dismissal appears to be in the best interest of the pupil or the program.

A variety of materials and equipment, listed earlier in this report, was employed along with various teaching techniques, field trips, and special projects. A qualified instructor guided the activities in the classroom. Instruction was highly individualized since no more than four pupils were assigned per hour. Group activities for better socialization, such as field trips and total group projects were helpful in providing motivation for cooperative efforts.

PUPILS PLACED IN CLASSROOM

Examination of pupil records maintained by the teacher and other school personnel revealed the following information about the pupils:

Age at entrance: 10 years, 9 months to 13 years, 2 months.
Race: All Negro
Sex: Nine male, two female.

Ten of the eleven pupils were placed in the classroom four weeks after school began. One pupil was added to the group in the early part of February. Pupils had to be tested and referrals sent to the Center before official placement could be made. The groups of pupils were either four or less selected from two regular sixth grade classes.

Attendance information shows that while assigned to the experimental classroom the pupils' attendance varied from a low of ninety percent to a high of ninety-seven percent. The mean attendance was ninety-four percent. At the same time attendance records for the regular classroom varied from a low of ninety-four percent to a high of ninety-nine percent, with a mean attendance of ninety-eight percent.

PUPIL RESULTS

In order to meet placement criteria, one requirement was a score of ninety-five or greater on an individual intelligence test. The Wechsler Intelligence Scale for Children (WISC) was selected for usage as a placement test. Results for the eleven pupils placed are given in the following table.

TABLE 4.93

RESULTS FOR SIXTH GRADE NEGRO UNDERACHIEVERS ON THE WECHSLER INTELLIGENCE SCALE FOR CHILDREN

N = 11	
Full Scale I. Q. Mean	101.2
Full Scale I. Q. Median	101
Full Scale I. Q. Standard Deviation	2.9
Full Scale I. Q. Range	95-106

The Peabody Picture Vocabulary Test was used as a pretest, post-test measure of verbal ability. Nine of the eleven pupils placed in this classroom had scores reported for both tests. Results are given for the nine pupils who had both tests in the following table.

TABLE 4.94

PEABODY PICTURE VOCABULARY TESTS RESULTS FOR NEGRO UNDERACHIEVERS GRADE 6

N = 9	October	May
Raw Score Mean	81.7	82.4
Raw Score Median	81	82
Raw Score Range	67-80	76-92
Standard Deviation	7.4	4.2
Standard Score Mean	96.8	93
Standard Score Median	95	94
Standard Score Range	77-112	85-100
Standard Deviation, Standard Score	9.8	5.4

4.254

Form A of the Peabody Picture Vocabulary Test was used in October and Form B used in May. As shown in the table, mean and median raw scores for the group increase slightly while the mean and median standard scores decrease slightly.

The standard score (I. Q.) means on both the pretest and posttest for nine pupils on the PPVT are lower than the mean I. Q. for all pupils in the group on the full scale WISC results. The Expanded Manual for the Peabody Picture Vocabulary Test indicates that in studies comparing the PPVT results with the full scale WISC that the scores correlated over a range from 0.30 to 0.84. For this group the scores of nine pupils on the full scale WISC and the pretest PPVT I. Q. have a Pearson r = .25.

The Wide Range Achievement Test was used as a measure of basic skills in reading, spelling, and arithmetic. It was felt earlier that results would provide a measure of academic progress. Results for individual pupils are given in Table 38, found in Appendix B. Group results are summarized in the following table.

TABLE 4.95

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR NEGRO UNDERACHIEVERS GRADE 6

N = 9	October	May
Reading Subtest		
G. E. Mean	5.9	8.1
G. E. Median	5.9	7.9
G. E. Range	4.6-8.1	5.2-11.7
Standard Score Mean	95.8	107.3
Standard Score Median	95	105
Standard Score Range	82-116	83-136
Spelling Subtest		
G. E. Mean	5.4	5.9
G. E. Median	5.7	5.8
G. E. Range	3.7-6.8	4.0-7.2
Standard Score Mean	91.7	91.4
Standard Score Median	93	89
Standard Score Range	75-102	76-109
Arithmetic Subtest		
G. E. Mean	5.0	5.4
G. E. Median	5.2	5.3
G. E. Range	4.2-5.7	3.9-6.7
Standard Score Mean	88.4	88.2
Standard Score Median	87	89
Standard Score Range	80-95	75-101

The above table shows that some gains were made by the group in grade equivalent on all three subtests. The noticeable gain is the significant gain shown on the reading subtest. Not only is the gain significant but the two sets of scores have a high positive correlation. This is shown in the following tables.

TABLE 4.96

PRETEST AND POSTTEST SCORES, WRAT READING SUBTEST - NEGRO UNDERACHIEVERS GRADE 6

Reading - Oct.	Reading - May	d	Rank of d	Rank with less frequent sign
5.9	7.9	-2.0	-5	
8.1	11.7	-3.6	-8	
6.8	10.5	-3.7	-9	
6.3	8.3	-2.0	-5	
4.6	6.6	-2.0	-5	
6.1	9.0	-2.9	-7	
4.6	5.2	-0.6	-1.5	
5.0	6.9	-1.9	-3	
5.9	6.5	-0.6	-1.5	
				T = 0

$N = 9$ $p < .01$

TABLE 4.97

PRETEST AND POSTTEST RANKS, WRAT READING SUBTEST - NEGRO UNDERACHIEVER GRADE 6

Reading - Oct.	Reading - May	d_i	d_i^2
5.5	5	0.5	.0.25
1	1	0	0
2	2	0	0
3	4	-1.0	1.00
8.5	7	1.5	2.25
4	3	1.0	1.00
8.5	9	-0.5	0.25
7	6	1.0	1.00
5.5	8	-2.5	6.25
			$\sum d_i^2 = 12$

$r_s = 0.899$ $p < .01$ (one-tailed test)

In Table 4.96 the Wilcoxson matched pairs sign test was used. Nine pairs of pupils' scores in grade equivalents are listed with associated differences and ranks of difference. The T score of zero is the smaller sum of like-signed ranks which has an associated critical value of less than .01 for a two-tailed test. There is an indicated difference between the scores on this subtest from October to May.

Table 4.97 utilized the Spearman rank correlation coefficient to determine the ordered relationship between the two sets of scores. Ranks of scores are listed along with differences in ranks and squares of differences in ranks. The Spearman rank coefficient was determined by correcting for tied ranks in the October scores. The $r_s = .899$ indicates a relatively high relationship between the two sets of scores with a critical value of $p < .01$ for a one-tailed test.

The Wilcoxson test and the Spearman rank correlation were also used for testing and comparing WRAT subtests and Iowa Test of Basic Skills (ITBS) subtests for which eight of the nine pupils in the group had scores. Other ITBS results are given in Table 4.98. Differences in scores were indicated with a critical value of $p < .05$ between the following pairs of subtests: WRAT reading subtest and ITBS reading subtest, WRAT reading subtest and ITBS vocabulary subtest, and WRAT spelling subtest and ITBS vocabulary subtest. The largest Spearman coefficient r_s, was found between the WRAT reading subtest and the ITBS vocabulary subtest where $r_s = .53$. The smallest r_s found was between the WRAT reading subtest and the ITBS reading subtest where $r_s = -.02$.

Eight of the nine pupils who were included in the previous group also had results on the Iowa Test of Basic Skills in the fall. This test is part of the basic system testing program for the Wichita Public Schools. Results for these pupils are presented in the following table.

TABLE 4.98

IOWA TEST OF BASIC SKILLS RESULTS FOR
NEGRO UNDERACHIEVERS GRADE 6

N = 8	October
Vocabulary Subtest	
G. E. Mean	4.33
G. E. Median	4.10
G. E. Range	3.5-5.5
Standard Deviation	0.67
Reading Subtest	
G. E. Mean	4.79
G. E. Median	4.95
G. E. Range	3.5-5.5
Standard Deviation	0.65
Arithmetic Subtest	
G. E. Mean	5.13
G. E. Median	5.15
G. E. Range	4.3-6.3
Standard Deviation	0.66

The supplementary classroom teachers were asked to rate the progress of the pupils in the areas of reading, spelling, and arithmetic.

The frequency of the teacher ratings for the nine pupils previously used are given in the following table.

TABLE 4.99

FREQUENCY OF TEACHER RATINGS IN READING, SPELLING, AND ARITHMETIC - NEGRO UNDERACHIEVERS GRADE 6

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating*			
	Much	Moderate	Slight	Little or None
1. Growth in:				
Reading	0	8	0	0
Spelling	1	7	0	0
Arithmetic	0	8	0	0

* One pupil not rated by teacher on Item 1

TABLE 4.100

FREQUENCY OF GAINS OR LOSS IN G. E. ON WRAT SUBTEST NEGRO UNDERACHIEVERS GRADE 6

Subtest	G. E. Gain				G. E. Loss
	3.0 or more	2.0-2.9	1.0-1.9	0-.9	
Reading	2	4	1	2	0
Spelling	0	1	1	4	3
Arithmetic	0	0	3	3	3

The teacher rating frequencies indicate that all pupils made moderate to much growth in all three areas. The frequency of gains and losses on WRAT subtests show seven pupils making gain scores of two years or more while six pupils had lower G. E. scores on the posttest than they had on the pretest. A comparison can be made between the gain or loss as indicated by the WRAT subtest score and the rating given by the teacher in the same area. One pupil in the group of nine who had pretest and posttest scores was not rated.

TABLE 4.101

COMPARISON OF TEACHER RATING AND PUPIL GAIN OR LOSS IN G. E. ON THE WRAT - NEGRO UNDERACHIEVERS GRADE 6

Teacher Rating					Totals
Much	0	0	1	0	1
Moderate	6	8	3	6	23
Slight	0	0	0	0	0
Little or None	0	0	0	0	0
Gain or Loss in G. E.	G. E. Loss	Gain 0-.9	Gain 1.0-1.9	Gain 2.0 or above	24

Table 4.101 shows that ten of the twenty-four ratings given had gain scores in WRAT subtests of one year or more and were rated by the teacher as having shown moderate to much growth in these areas.

The supplementary classroom teachers were also asked to rate the observed growth or progress in attitude changes and skill areas. The frequency of the teacher ratings are given in the following table.

TABLE 4.102

FREQUENCY OF TEACHER RATINGS OF OBSERVED POSITIVE GROWTH IN ATTITUDES AND SKILLS - NEGRO UNDERACHIEVERS GRADE 6

Please rate the growth or progress you have observed for each pupil.

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
2. Positive changes in attitude toward:				
a. Self	4	5	0	0
b. School	6	3	0	0
c. Others	5	4	0	0
3. Growth or progress in the following:				
a. Study skills	3	5	1	0
b. Physical skills	4	4	1	0
c. Musical skills	3	3	1	2
d. Artistic skills	3	2	2	2

Observation of the frequencies in the above table indicate that the teacher ratings in changes in attitudes were higher than changes in the skill areas. It might be noted at this point that the pupils were in the classroom for one hour per day and may not have been able to observe changes in some of the skill areas.

Since the WISC, WRAT, and PPVT all have standard score means of 100 and a standard deviation of 15, these become useful in comparing directly each pupil's performance from one test to another. The standard scores for each pupil in this group are presented in Table 38, found in Appendix B.

4.262

Staffings were held at the school and included the principal, assistant principal, the regular classroom teachers and the school counselor, as well as the experimental classroom teacher and Center personnel. The individual cases were discussed and recommendations were made. The recommendations for the group and frequencies fell in the categories listed as follows:

1. Needs structured classrooms or activities in junior high school.	5
2. Should involve in special areas i.e. music, drama, and sports.	7
3. Needs continued therapy	1
4. Needs use of Language Master	1
5. Needs positive reinforcement	3

Supportive services of the curriculum consultants and resource consultant were available by contact with the Center. No particular programs were initiated by the curriculum consultants in art, music, and physical education since the pupils did not meet as one group and were in the special room only one hour per day. The resource consultant provided special materials and equipment. A list of these is presented in Appendix B.

One pupil was selected from each supplementary classroom for further investigation. The pupils were not selected on a random basis, but as a result of a joint effort between center personnel, the supplementary classroom teacher, and members of the Research Division. The pupil selected from each classroom was not necessarily representative of the type of pupil placed in the particular classroom but it was the intent to make the case study pupils representative of the types of handicaps in the supplementary classroom program. The following summary is for the pupil selected from the Negro underachievers classroom, grade six.

⑥

CASE STUDY SUMMARY

Background Information

Family Information

The subject was a male Negro born in November, 1955. He had four younger female siblings. Also living in the home was a half-brother and half-sister from a previous marriage of the subject's mother. The family resided in a low socio-economic neighborhood. The father was self-employed, operating an appliance service, and made barely enough to cover daily living expenses. The mother was a housewife. The home was over-crowded but relatively well kept.

Health History

The subject was born with no complications and birth occurred at nine months. Developmental processes appeared normal with walking starting nine months, speech at six months. Toilet training was reportedly accomplished at one year.

The subject had the usual childhood diseases. It was reported by the mother and school personnel that the subject became extremely tired and weak at times and was unable to attend school. Hearing accuity was also questioned. In addition, the subject complained of his knees hurting frequently.

School Adjustment and Achievement

The subject had a history of school difficulties. Teachers generally reported that he was not working to expected potential. In addition, he was reported as being "easily directed by others," frequently involved in mischief," and "uncooperative." His biggest problem appeared to be his passive attitude toward school and learning.

His best subjects in school were Mathematics and Art, while the poorest were Reading and Science. Psychological tests indicated that he had normal average intellectual ability. A Wechsler Intelligence Scale for Children given in September, 1967, yielded a verbal IQ of 87, a performance IQ of 107, and a full scale IQ of 96.

Referral, Evaluation, Recommendations and Placement

Referral

During September, 1967, a referral form for the subject was processed by the Center. A diagnostic evaluation was recommended, including a social history, psychological evaluation and physical examination. The social history and psychological evaluation was obtained by the staff social worker and the staff school psychologist assigned to the case. The subject was referred by the Center to a medical doctor for a physical examination. In addition, consideration for placement in the experimental classroom for Negro underachievers was requested due to the subject's inability to produce in a regular classroom (criterion for placement in the experimental classroom are stated earlier in this section).

Evaluation

A physical examination revealed no physical anomalies. At the time of the examination the subject was suffering from an acute respiratory ailment, the diagnosis of this being deferred. Some suggestion of an allergic problem existed. Further observations were indicated. However, the physician felt that this ailment was not the reason for the subject's underachievement.

The staff school psychologist's report indicated that the subject had normal average intellectual ability with somewhat higher ability in the performance area.

Recommendations and Placement

The Diagnostic and Evaluative Admissions Committee of the Center had a staffing during September, 1967. Information was presented by personnel of the sending school and those Center personnel who had been assigned to the case. The following recommendations were made:

(1) Placement in the Experimental Classroom for Negro Underachievers.
(2) Instruction given in an informal setting.
(3) As much individual attention as possible.

As a result of these recommendations, the subject was placed in the Experimental Classroom for Negro Underachievers for the 1967-68 school year.

Objectives, Procedures and Results

Objectives

Since the subject was continually described as passive and disinterested in school, an attempt was made to decrease his passivity and increase his participation and interest in classroom activities. This would seem to be the first step toward total school involvement.

Procedures and Results

An attempt was made to present all educational material in concrete form, allowing realistic sensory experiences to follow up each daily presentation. In this way it appeared that the pupils, by hearing, seeing, smelling and/or touching, could better understand a specific thing in relation to themselves and their environment. For instance, modes of transportation were introduced. After the train was discussed in the classroom, a trip to the station followed. Teacher comments concerning the subject in point consisted of "disinterested." However, approximately three months later, comments made after a similar trip consisted of, "great improvement in subject since October." Other responses to classroom activities through the year consisted of "much orderly excitement;" "_____ took hold of this and really enjoyed it."

The subject showed much interest in art and music activities. These subjects would maintain his interest for long periods of time. Staff consultants in art and music furnished equipment and supplies for use in the classroom.

Social adjustment appeared to improve greatly in the experimental classroom, although on four occasions during the year the subject's regular teacher reported instances of misbehavior and very little academic output.

4.268

The trend in the experimental classroom appeared to be one of general and consistent improvement in classroom activities and social adjustment. Academic and social behavior in the regular classroom, however, appeared to remain static from the time the referral was made until the closing of the school year.

EXPERIMENTAL CLASSROOM FOR NEGRO UNDERACHIEVERS GRADE 8

An experimental classroom was established in a predominantly Negro junior high school to attempt to discover and remedy the underlying causes of Negro underachievement. The intent of the program was to search for symptoms which brought about underachievement.

OBJECTIVES

1. To identify the characteristics of Negro underachievers in the Wichita area.
2. To discover causes that bring about these characteristics.
3. To develop techniques to enable teachers and others who work with Negro underachievers to remedy the causes of underachievement.
4. To enable a change in behavior to occur in the positive direction.
5. To alleviate external pressure in order to promote internal motivation.
6. To improve the pupils' sense of responsibility.

4.270

METHODS AND PROCEDURES

Pupils selected for placement in the experimental classroom were taken from the regular eighth grade class. Assignment to the special room was the responsibility of the building principal. Pupils were scheduled so that his or her assignment to the experimental room was a replacement for the regular eighth grade social studies class (U.S. History).

Pupils selected for placement met the following criteria:

1. A score of 95 or above on an individual intelligence test.
2. One year or more below grade level on the ITBS or PREP test results.
3. Should not show the characteristics of being emotionally disturbed.
4. Should not be a school discipline problem.
5. Should be placed in the experimental room for the entire school year unless dismissal appears to be in the best interest of the pupil or the program.

A maximum of sixteen pupils per day with no more than four per period was the established class load.

A variety of materials were utilized as well as various techniques of teaching, field trips, and special projects. Instruction was highly individualized since no more than four pupils were assigned per hour.

PUPILS PLACED IN CLASSROOM

Examination of pupil records maintained by the teacher and other school personnel yielded the following information about the pupils:

Age range at entrance: 12 years, 9 months to 14 years, 0 months
Race: All Negro
Sex: Eleven male, two female

Eleven pupils were placed in the classroom approximately four weeks after school began. Two other pupils were added to the class about two weeks later. Pupils had to be tested and referrals sent to the Center before official placement could be made.

Attendance information was not available for this group.

PUPIL RESULTS

Very little information other than Wechsler Intelligence Scale for Children results was available for the group. The qualified classroom instructor who began working with the group became ill and was hospitalized during December. A suitable replacement was not available at that time or at the end of the first semester. The Diagnostic Center personnel and the project director decided that under the circumstances it would be best to abandon the experimental classroom and reassign the pupils to regular eighth grade social studies classes. A summary of available test results is presented in the following table.

TABLE 4.103

WECHSLER INTELLIGENCE SCALE FOR CHILDREN RESULTS FOR NEGRO UNDERACHIEVERS GRADE 8

N = 13	
Full Scale I. Q. Mean	101
Full Scale I. Q. Median	101
Full Scale I. Q. Standard Deviation	4
Full Scale I. Q. Range	94-107

During November, members of the Research Division worked cooperatively with the Educational Psychology Department at Wichita State University to establish a program of gathering observational data on the underachievers in the junior high classroom. Preliminary observations were taken in December and regular observations began at the start of the second semester. Two graduate students from the university observed, on a regular basis, two pupils from the underachiever group during regular classroom activities. Since the special classroom ceased to exist at the end of the first semester, data gathered concerning observed changes or lack of changes in behaviors during the second semester may or may not be attributed to the fact that these pupils were involved in a special program during most of the first semester.

PART 5

EVALUATIVE STUDIES CONDUCTED BY THE CONSULTANTS

A part of the responsibility of the consultants involved determining the feasibility of certain methods to be used as therapeutic and/or educational measures for exceptional children in or out of the classroom. Many of the efforts of the consultants have been mentioned in previous parts of this report.

Part 3 gives a description of the procedures used by the resource consultant in gathering information about materials and equipment in order to evaluate the effectiveness and possible uses for these devices with exceptional children. A sample of the kinds of materials and equipment used in each of the supplementary classrooms is presented in Part 3 of this report in Table 3.3. A complete listing of materials and equipment checked out to the supplementary classrooms is given in Appendix B. From the reports such as those in Table 3.3, and visits with the classroom teachers, the resource consultant was better able to determine the selection of materials and how one device or material could be used with pupils having similar handicaps in other classrooms.

It appears that these procedures of gathering information are effective. There is, however, an apparent need for further investigation as to how results can best be utilized and how information as well as materials and equipment can be interchanged between teachers and the Center staff.

Many of the tasks and the results of efforts of the curriculum consultants are related in the various reports on the supplementary classrooms in Part 4 of this report. Most of the classroom reports contain evaluations of activities as reported by the consultants for art, music, and physical education.

The art consultant reported that each supplementary classroom, with the exception of those for the Negro underachievers, was visited once each week during the first semester and once every two weeks during the second semester. In most instances she worked directly with the class for sixty to ninety minutes, while the teacher observed and/or participated. Projects were initiated with verbal and/or written plans, and explanations were provided for the teacher. The consultant encouraged the teacher to make use of his or her own ideas for projects and allowed the teacher to determine the schedule for art periods during the week.

The summary evaluation of the eleven supplementary classrooms provided by the art consultant indicated that the consultant judged the projects successful in eight of the eleven classrooms with some success evident in the other three classrooms. Objectives or goals determined by the consultant were reached to some extent in all eleven rooms, with four of the eleven rooms apparently reaching most of the goals for their particular room.

The art consultant conducted an "evaluative study in creativity" in six of the supplementary classrooms. Four of these were emotionally disturbed pupils and the other two were the elementary level learning disabilities pupils. For this study each pupil was presented with a set of eight plates ($8\frac{1}{2}$ x 11) with a pre-determined mark on each plate. The only instruction given was that each pupil had to use the pre-determined mark provided as part of his drawing. This procedure was followed on three occasions during the year in most of the above mentioned classrooms. The set of eight plates per pupil was then evaluated by the consultant on the basis of the following criteria: (1) conventionality, (2) theme variability, (3) physical expansion, (4) form initiation, and (5) elaboration. A chart of results was kept by the consultant for each classroom involved.

Results reported by the consultant indicated that thirty-nine percent of the pupils who were evaluated two or more times showed an indicated gain in "creativity." Thirty-one pupils were evaluated two or three times with a mean score of 20.7 points out of a possible forty points per evaluation.

The music consultant also reported that visits were made to each supplementary classroom, with the exception of those for the Negro underachievers, once each week during the first semester and once every two weeks during the second semester. In most cases the consultant worked with the class for a period of thirty to forty-five minutes while the teacher observed and/or participated.

In evaluating the music portion of the supplementary classroom program, the music consultant reported moderate to much success in attaining goals and objectives in six of the eleven classrooms with a lesser degree of success in the others. The most difficult classrooms to evaluate were indicated as the junior high level classrooms. The reason given for this was that several pupils were scheduled into other regular classrooms during the time the consultant was available.

The music consultant also conducted an experiment, "A Technique to Assess the Preference for Intensity of Musical Stimuli in Young Hard-of-Hearing Children." A complete description and results of this experiment are presented in Appendix C. The experiment was conducted using ten pupils from the pre-school and kindergarten hearing handicapped classroom. The purpose was to attempt to determine what decibel level of auditory stimuli (music) each child preferred. Results indicated that the three pupils discussed in this report preferred music at the ninety or eighty decibel level of intensity.

The physical education consultant reported that visits were made each week to eleven supplementary classrooms during the first semester and once each two weeks during the second semester. In most cases the consultant worked with the class for twenty to thirty minutes while the teacher observed and/or participated.

The consultant developed a sequence of exercises and games appropriate to the age level of the students in each classroom. In order to determine the effects of the prescribed programs, the consultant administered two kinds of tests. The American Association for Health, Physical Education, and Recreation Youth Fitness Test was used as a pre and post measure of physical fitness. Modifications in the subtests were made for the hearing handicapped classrooms and the secondary school age severely orthopedically handicapped. Modifications included using a hanging time to replace pull-ups, shortening the distance from 50 to 25 yards for the dash, and from 600 to 200 yards for the run-walk for the pre-school group. Wheel chairs were used for the shuttle run with the orthopedically handicapped. Results of this testing was presented by classroom in Part 4. Individual results by classroom are given in Appendix B.

The second kind of testing performed was the Kraus-Weber Test of Minimum Muscular Fitness. The test consists of six separate tests to indicate the level of strength or flexibility for certain key muscle groups. The tests are graded on a pass or fail basis, even though the authors provide a means of scoring partial movements from one to ten.

The physical education consultant adapted a partial scoring system and used a point system for recording results. Of the six tests, tests one, two, and six were given a partial score between zero and one in tenths due to the position of the pupil in attempting the required movement. Tests three, four, and five involved holding a position for ten seconds. This resulted in a partial score from zero to one in tenths for the number of seconds the position was held. Using this partial scoring system, a pupil passing all six tests received a point score of six, while a partial score could be recorded in tenths for any value between zero and six.

Results of this testing is presented by both methods. First, the pupils were scored on a pass-fail basis, and second, they were scored using the point partial scoring procedure. The consultant was interested in determining which tests were most frequently failed by special education or handicapped pupils.

Results presented here are in age groups rather than by types of handicaps determined by types of classrooms in the supplementary classroom program. The tests were administered three times during the year. Not all pupils were tested each time resulting in different numbers of pupils in each group. Results using the pass-fail method are given in the following table.

TABLE 5.1

KRAUS-WEBER MINIMUM MUSCULAR FITNESS TEST RESULTS FOR HANDICAPPED PUPILS

	Number of Pupils	Number Passing	Percent Passing
Ages 3-5			
Fall	3	0	0
Winter	6	0	0
Spring	1	0	0
Ages 6-8			
Fall	17	3	18%
Winter	21	8	38%
Spring	20	7	35%
Ages 9-11			
Fall	19	5	26%
Winter	21	6	29%
Spring	19	3	16%
Ages 12-14			
Fall	5	2	40%
Winter	6	3	50%
Spring	3	2	67%
Ages 15-21			
Fall	9	1	11%
Winter	9	2	22%
Spring	9	2	22%

An article in Research Quarterly, May, 1954, presented a study by Hans Kraus and Ruth Hirshland,[1] in which they examined 4,458 Eastern United States school children from both urban and rural communities. The study involved comparing their achievement with 3,156 Swiss, Austrian, and Italian children. Results given in the study show that 57.9% of the United States children and 8.7% of the European children tested failed one or more of the tests. Other surveys made in the United States seem to corroborate the results of Kraus and Hirshland.

It would not be appropriate to compare the results of these handicapped pupils with those in the previously mentioned study. There was no mention of age ranges, types of pupils included, etc. Table 5.1 does indicate a rather large percentage of failure for the groups as a whole. Limitations in interpreting these results would also include the wide range of age levels and a variety of handicaps or multiple handicaps among the pupils tested.

The physical education consultant considered the partial scoring point system a better method of working with handicapped pupils. The point system, described previously, was used for the same pupils in the groups presented in Table 5.1. These results are given in Table 39, found in Appendix B. The consultant reported that difficulty in communicating with the young hearing handicapped pupils may have affected the results. In the six to eight years of age group, only two of fifteen pupils passed all six tests both times. However, eleven of the fifteen did increase their point score from fall to spring. In the nine to eleven years of age group, only one of twelve pupils passed all six tests both times. Nine of the twelve pupils increased their point score from fall testing to spring testing. Among pupils ages 12-14, two of the six pupils passed all six tests both in the fall and spring. Four other pupils had results only for fall and winter, or winter and spring. In the group ages 15-21, no pupil passed all six tests both times. Only four of the nine pupils showed gains in point scores. In the older group of trainable mentally handicapped pupils, a problem of understanding directions and/or instructions may have influenced the results.

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[1] Hans Kraus and Ruth Hirshland. "Minimum Muscular Fitness Test in School Children," Research Quarterly, Vol. XXV, No. 2, (May, 1954), p. 178.

PART 6

SUMMARY - COMMENTS - CONCLUSIONS

SUMMARY

The Title III project in Wichita provided a special education diagnostic and resource center for the second year of a three year operational grant. This project was designed to meet the needs of severely handicapped children and youth in the Greater Wichita Area. In order to provide the services needed by handicapped children, it was necessary to obtain cooperation from existing community agencies, a number of participating school districts, and local private practitioners. The staff based at the Center included coordinators, psychologists, social workers, a librarian for visually handicapped, a peripatologist. and consultants in art, music, and physical education.

The primary focus of efforts was providing services and educational programs for handicapped children referred to the Center. The initial set of supplementary classrooms provided during the first year was expanded, and another area was included during the second year of operation. Supportive services were provided with the primary emphasis on the supplementary classroom program. These services were also available to some extent to other pupils not receiving special classroom placement.

Efforts were made to encourage the development and further investigation of special materials and techniques.for working with various types of handicapped pupils. Dissemination of information and demonstration of usage were provided in part by in-service training programs.

The utilization of parental interest and involvement, along with other avenues of Federal support, usage of additional funds made services available to a larger number of pupils.

Information about the project and its services and programs was disseminated through various meetings, conferences, written reports, video tape programs, brochures, the news media, and the first year's evaluation report.

COMMENTS

The evaluation of the Title III project during the second year of operation had as a major focus the effects of services and programs on the individual pupil referred to the Center. There were four areas of interest involved; namely (1) the effectiveness of diagnostic and evaluative services in determining appropriate educational plans and placement for referred pupils, (2) the extent of educational growth and personal adjustment of pupils referred to the Center, (3) the extent to which pupils, along with parents, attained their goals of education, and (4) how well innovative and/or exemplary methods and procedures have been developed.

The first area, concerning the effectiveness of diagnostic and evaluative services, was examined in terms of the types of services, the numbers of pupils served, and the reactions of parents, agency representatives, and school personnel.

Fewer pupils were referred to the Center during the second year (793) than the first year (990). A larger number of pupils were provided medical and psychological services in addition to continuing these services for 163 pupils referred during the first year. The staffing procedure was altered to better accommodate the exchange of information concerning a referred pupil between personnel involved. The referral process was revised and a screening procedure made possible a more efficient method of utilizing information about the referred pupil; consequently, more pupils were served.

The reactions of parents surveyed indicated that they considered psychological and medical services helpful and that they felt they were allowed participation in formulating their children's educational plans. School personnel including teachers, principals, counselors, nurses, and special clinicians felt that the referral procedure had improved and the other services provided by the Center were helpful. Teachers in the supplementary classroom program responded favorably to the process of staffing and re-staffing of pupils for periodic evaluation. These teachers also considered the information obtained and presented by the social workers and others as helpful. There was an indication of a need for a better means of communication among the persons concerned regarding the referral of a pupil to the Center. Diagnostic testing and interpretation by the Center staff was not sufficient in the opinion of the staff. This was due to lack of time and personnel to perform the needed tasks to assure adequate follow-up services in the project area. Center staff members felt they had fulfilled most of their primary objectives, although improvement is still needed in some key areas.

The second area of concern was the extent of educational growth and personal adjustment of pupils referred to the Center. The task of determining the amount, kind, when, and how educational growth and personal adjustment occurred in each pupil referred to the Center would be nearly impossible. Since the major thrust of efforts in this area was in the supplementary classroom program, this appeared to be the best indicator of the extent to which educational growth and personal adjustment could be measured.

Results presented by supplementary classroom gave indications that growth has occurred in several pupils. Thirteen, then later, twelve supplementary classrooms accommodated a total of 131 pupils during the year. Of these, twenty-eight progressed sufficiently and were returned to regular classroom programs during the year or for the 1968-69 school year. Thirteen others were diagnosed as needing a different kind of special placement.

Test results were beginning to show better gains in certain academic areas in some classrooms, even though questions were still raised regarding the appropriateness of the instruments for handicapped pupils. The influence of the curriculum consultants was noted by examining test and non-test sources of information about pupils' progress or lack of progress in the areas of art, music, and physical education. Teacher ratings of progress in academic and personal adjustment areas gave some evidence that many pupils were showing signs of improving and at the same time others seemed to be regressing.

The third area of concern was that of determining the extent to which pupils along with parents, can and have attained their goals of education. To some, the fact that the pupil can be maintained in a program in a school setting may be the only goal established. It appears from the reactions of parents, teachers, and others that many pupils are attaining what could be termed "intermediate" goals. A longitudinal study of longer duration would be necessary to be able to assess the extent to which educational goals are attained or failed. The fact that all referred pupils do not receive the same amount or kind of service, and some receive none, may greatly influence the extent to which educational goals can be attained.

The fourth area of interest involved how well innovative and/or exemplary methods and procedures were developed for working with handicapped pupils. One definition of innovation involves the process of introducing something new. Certainly most of the procedures and methods used in this project are not new. Many of the methods used by teachers, staff members, and others in working with handicapped pupils have been used elsewhere. Some facets of these are being adapted and tried with various types of handicaps and may be considered exemplary. An educational Center able to coordinate and communicate among various state and local agencies, private practitioners, parents, the community, and schools in the area may well be a worthy example.

Several methods and procedures appeared to be effective among the different types of handicaps involved in the project. Some techniques appear effective in most handicap areas. One example would be the use of behavior modification techniques, which supply some kind of a reward for acceptable social behavior. This technique was used in several supplementary classrooms. For hyperactive pupils, study carrels were effective in reducing external stimuli and provided a place for a pupil to work on his own. Perceptual development procedures based on weaknesses identified by tests of perceptual abilities were utilized in both the learning disabilities and the emotionally disturbed areas. Various kinds and types of multi-sensory equipment and structured kits or sets of books seemed to provide stimulus for many pupils to aid in the development of weak academic areas. In some instances repetition of material with different approaches in presentation was effective. The use of an amplification system with the hearing handicapped pupils was desirable to promote better communication between teacher and pupil. Various types and kinds of teacher-made charts or other instructional aides were apparently effective in accomplishing certain tasks among individual pupils.

A continued follow-up of pupils who have been served in any way by the Center or associated programs should help supply further information concerning additional effects of the Title III project.

CONCLUSIONS

The design of project evaluation allows conclusions to be drawn primarily in terms of how well the objectives of the project have been met. At this point it appears, for this project, that three of the four objectives have been attained to a large degree. The fourth objective appears to be attained to the least extent.

As of now, it appears that a school oriented center can coordinate activities involving cooperative efforts of the community and provide programs and services for pupils who would probably not be able to continue in a regular school program.

APPENDIX A

DATA GATHERING DEVICES

DATA DESCRIPTION AND SUPPLIER

Type of Data	Type of Information	Supplier
Detailed Records	Attendance records, basic test information, general physical information, etc.	Classroom teacher
Case Histories	Write-ups on selected cases, showing family background, home problems if any, etc.	Social Workers
Case Studies	Anecdotal comments, parental contacts, special procedures used, and other detailed information.	Teachers, Diagnostic Staff, and others who have had contact with selected pupil
Anecdotal Records	Brief behavior description showing typical or atypical behavior on all pupils.	Classroom teacher
Samples of Classwork	Typical work in various areas, taken at random times during school year.	Classroom teachers and consultants
Reaction Questionnaires	Reactions to programs, pupils, services, objectives, etc.	Teachers, parents, Diagnostic Staff, principals, counselors, participating districts, and Agencies
Activities Rating Scale	Ratings of activities included in classroom program and items included in the curriculum.	Hearing and trainable teachers
Behavior Checklist	Ratings of school and classroom behaviors.	Underachiever experimental and regular teachers
Materials Survey	Includes types of equipment, materials, etc. used in the supplemental classrooms. How, when, and how effective for a class or individuals.	Resource consultant and classroom teachers

DATA DESCRIPTION AND SUPPLIER
(continued)

Type of Data	Type of Information	Supplier
Wide Range Ach. Test Peabody Picture Vocab. Test Draw-A-Person Test	Test information other than basic test program and other individual tests for referral purposes.	Psychologists and psychometrist
Nebraska Test	Individual test for hearing impaired.	Psychologists and psychometrist
Physical Fitness Test Kraus-Weber Test	Test information for determining physical growth and/or prescribing programs.	Physical education consultant

TITLE III

DATA ACQUISITION SUMMARY

	Hearing Handicapped	Learning Disabilities	Trainable Mentally Handicapped	Orthopedically Handicapped	Emotionally Disturbed	Underachievers
Detailed Records	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year
Case Histories	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year
Case Studies	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year
Anecdotal Records	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year
Samples of Classwork	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year	Throughout School Year
Reaction Questionnaires	May '68	May '68	May '68	May '68	May '68	May '68
Activities Rating Scale	Nov. '67 Feb. '68 May '68		Nov. '67 May '68			Behavior Checklist Nov. '67 May '68

Materials Survey	Second Semester	Second Semester	Second Semester	Second Semester	Second Semester	Second Semester
Wide Range Ach. Test	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68
Peabody Picture Vocab. Test	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68
Draw-A-Person Test	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68	Oct. '67 May '68
Nebraska Test	Feb. '67 Nov. '67					
Physical Fitness Test Kraus-Weber Test	Fall '67 May '68	Fall '67 May '68	Fall '67 May '68		Fall '67 May '68	

INSTRUCTION FOR USING RATING SCALE FOR TMH PUPILS

Complete information on the top lines; be sure to include month, day, and year on the date the rating is given.

A rating of 1, 2, 3, 4, or 5 must be given for each item. However, a particular item such as Feminine hygiene would not apply in rating a boy. On items that do not apply, mark an X in the blank for that item.

Do not give a rating on particular sub-headings. Example: I. C. Organized Games should not be rated as such, only the activities listed below the heading.

Use the accompanying guide to help determine the 1 to 5 level in rating a particular activity or item on the rating scale. In some cases sub-headings may be rated. Use the guide carefully since rating headings may apply to rating each item in that section.

RATING GUIDE FOR TMH PUPILS
Revised Copy

Level IV

I. PHYSICAL GROWTH AND DEVELOPMENT	1	2	3	4	5
A. Motor Development	Evidence of ability	Functional though awkward motion	Evidence of control	Sureness of movement	Purposeful and appropriate use
1. Ball playing a. catching	Trapping	Stands still, hands ready for bounced ball	Moving, hands reach for ball bounced	Success catching ball on the fly	Catches undirected ball
b. throwing	Release	Proximate release with direction	Distant release	Distant release with direction	Moving and throwing
2. Rhythm instruments	Exploration	Pounding (e.g. drums)	Shaking (e.g. bells)	Striking, two hands together	Holding with one hand, striking with other
B. Manipulative Development	Lack of interest	Exploration	Trial & Error	Some degree of ability	Able to do task
1. Cutting					
2. Finger painting					
3. Woodworking a. hammering					
b. sawing					
c. screwdriver					
4. Clay play					

	1	2	3	4	5
C. Organized Games	Evidence of some ability to attempt games fundamentals	Attempts games fundamentals awkwardly	Evidence of some control of games fundamentals	Not skillful but has some effectiveness in games fundamentals	Some skill in most of the game fundamentals
1. Bowling					
2. Dodge ball					
3. Kick ball					
4. Swimming					
5. Softball					
6. Basketball					
7. Badminton					
8. Relays					
9. Tennis					
10. Croquet					
11. Horseshoes					
12. Shuffleboard					
13. Ring toss					
14. Bean bag throw					

	1	2	3	4	5
D. Musical Games & Rhythm	Interest at a distance	Exploration	Imitation	Enjoyment and ease in activity	Partici-pates with originality
1. Rhythm band					
2. Oh, Johnny, Oh					
3. Virginia Reel					
4. Ach Ja!					
5. I Put My Right Hand In					
6. Clapping					
7. Marching					
8. Listening to records					
9. Singing					
II. SELF CARE					
A. Clothing	Dependence	Awareness, willingness, interest	With an adult helping	Independence with direction	Independence
1. Dressing					
a. shoe ties					
2. Care of clothing					
a. hanging up clothing					
b. shining shoes					

	1	2	3	4	5
A. Clothing (con't.)	Dependence	Awareness, willingness, interest	With an adult helping	Independence with direction	Independence
c. keeping clothes brushed					
B. Personal Hygiene					
1. Care of nose and mouth when coughing or sneezing					
2. Washing hands and face					
3. Toilet education					
4. Combing and brushing hair					
5. Brushing teeth					
6. Use of deodorant					
7. Using soap					
8. Shampooing and setting hair					
9. Feminine hygiene					
10. Appropriate makeup					
11. Care of nails					

	1	2	3	4	5
B. Personal Hygiene (con't.)	Dependence	Awareness, willingness, interest	With an adult helping	Independence with direction	Independence
12. Shaving					
13. Care of bathroom equip.					
14. Use and disposing tissues					
15. Going to barber shop					
C. Eating					
1. Skills a. spoon	Semi-solid in spoon	Liquid in spoon	Solid in spoon	Holds and uses spoon properly	Appropriate use of spoon with other utensils
b. fork	Interest in using fork	Uses fork like a spoon	Uses fork with ease	Cuts with fork	Uses fork appropriately
c. knife	Interest in using knife	Spreads with knife	Cuts with knife	Uses knife and fork together	Uses knife efficiently
d. drinking	Drinks independently with cup or glass	Drinks from fountain properly	Drinks through a straw	Eats and drinks independently	Eats, drinks, and talks
e. passing food	Dependence	Awareness, willingness, interest	With an adult helping	Independence with direction	Independence
f. helping self to food					
g. using napkin					
h. care of lunchbox					

	1	2	3	4	5
2. Personal manners	Unaware of proper conduct	Aware of proper conduct but doesn't practice it	Able to practice proper conduct when reminded	Need only occasional reminding	Practices proper conduct independently
a. sitting quietly at the table					
b. waiting for others to be served					
c. taking cookie or cracker nearest him					
d. chews quietly with lips closed					
e. chews thoroughly not gulping food					
f. waiting for others to be finished					
g. pulls chair out					
h. sits and pulls chair up to table					
i. gives Thanks					
j. use of please, thank you, and excuse me					

	1	2	3	4	5
D. Safety	Dependence	Awareness	Accepts and follows advice	Usually responsible	Responsible for own safety
1. In classroom a. avoidance of hot stove or radiator					
b. use of hot water					
c. holding on to banisters					
d. using kitchen stove					
e. using household appliances					
f. non-edible substances					
2. Out of doors a. from car to school					
b. crossing street					
c. on playground					
3. Outside the classroom in school building					
4. Riding in an automobile					

	1	2	3	4	5
D. Safety (con't.)	Dependence	Awareness	Accepts and follows advice	Usually responsible	Responsible for own safety
5. First aid for small cuts					
6. Reads and understands signs					
7. Telephoning Police					
8. Telephoning in case of fire					
9. Avoidance of unfamiliar persons or animals					
III. COMMUNICATIVE ABILITIES					
A. Listening and Speaking					
1. Listening or oral language	Listens for directions	Pays attention to oral language with supportive action	Responds to simple oral direction	Responds to a series of familiar oral directions	Can remember and carry an oral message
2. Using telephone					
a. dialing	Works the dial indiscriminately	Can dial "O" for operator for help-fire, police	Dials own telephone number when printed	Dials own telephone number from memory	Dials other telephone numbers when printed

	1	2	3	4	5
A. Listening and Speaking (con't.) b. talking	Listens but cannot carry on a conversation	Can carry on a conversation if someone else answers and gives him the phone	Can call his own home and carry on a conversation	Can give name and address and state needs	Can take a call and relay a message successfully
3. Group activities a. field trips	Indicates little or no interest	Willingness to go	Conforms to routine	Accepts responsibility in routine	Conforms to flexible schedule
b. plays	Interest at a distance	Exploration	Imitation	Enjoyment and ease in activity	Participates with originality
c. role playing					
d. story telling					
4. Conventional social patterns	Apparently unaware of formal expression	Apparently aware of formal expression	Prompted or imitative expression	Imitates expression in usual situations	Appropriate independent use of expression in a variety of situations
a. please					
b. thank you					
c. greeting					
d. introductions					

	1	2	3	4	5
B. Identification					
1. Name	Tells first and last name	Reads name	Traces name	Writes name	Writes name in cursive writing
2. Address	Tells address	Reads address	Traces address	Writes address	Writes address in cursive writing
3. Telephone number	Tells telephone number	Reads telephone number	Traces telephone number	Writes number	Writes telephone number in cursive writing
C. Word Recognition	Apparently unaware of any relation between spoken words and printed symbols	Repeats words after teacher	Recognizes the word some of the time or with some prompting	Selects words by sight	Reads and understands the word in most of the places it would ordinarily appear
1. Own name					
2. Own address					
3. Own telephone number					
4. Classmates names					

	1	2	3	4	5
C. Word Recognition (con't.)	Apparently unaware of any relation between spoken words and printed symbols	Repeats words after teacher	Recognizes the word some of the time or with some prompting	Selects words by sight	Reads and understands the word in most of the places it would ordinarily appear
5. Informational words					
a. ladies					
b. gentlemen					
c. girls					
d. boys					
e. women					
f. men					
g. rest room					
h. toilet					
i. washroom					
j. exit					
k. lounge					
l. in					
m. out					

C. Word Recognition (con't.)	1 Apparently unaware of any relation between spoken words and printed symbols	2 Repeats words after teacher	3 Recognizes the word some of the time or with some prompting	4 Selects words by sight	5 Reads and understands the word in most of the places it would ordinarily appear
5. Informational words n. on					
o. off					
p. up					
q. down					
r. bus					
s. fire					
t. eggs					
u. milk					
v. mail					
w. water					
x. soap					
y. salt					
z. candy					

C. Word Recognition (con't.)	1 Apparently unaware of any relation between spoken words and printed symbols	2 Repeats words after teacher	3 Recognizes the word some of the time or with some prompting	4 Selects words by sight	5 Reads and understands the word in most of the places it would ordinarily appear
5. Informational words aa. school					
bb. sugar					
6. Safety words a. stop					
b. go					
c. walk					
d. wait					
e. look					
f. listen					
g. R.R. or railroad					
h. keep out					
i. poison					
j. enter					

	1	2	3	4	5
C. Word Recognition (con't.)	Apparently unaware of any relation between spoken words and printed symbols	Repeats words after teacher	Recognizes the word some of the time or with some prompting	Selects words by sight	Reads and understands the word in most of the places it would ordinarily appear
6. Safety words k. crosswalk					
l. wet paint					
m. danger					
n. quiet					
7. Days of the week a. Sunday & Sun.					
b. Monday & Mon.					
c. Tuesday & Tues.					
d. Wednesday & Wed.					
e. Thursday & Thurs.					
f. Friday & Fri.					
g. Saturday & Sat.					

	1	2	3	4	5
D. Number, time, and money concepts	Unaware of concept	Associates a few objects with concept	Attaches meaning to concept	Attaches correct meaning to concept	Able to use concept effectively
1. Number concept					
2. Time					
3. Money a. recognition					
b. making change					
IV. WORK SKILLS AND HABITS					
A. Care of Equipment and Materials	Dependence	Awareness, willingness, and interest	Helping adult	Independence with direction	Independence
1. Care of household equipment a. broom and mop					
b. vacuum cleaner					
c. floor polisher					
2. Care of kitchen equipment a. mixer					
b. small appliances					

	1	2	3	4	5
A. Care of Equipment and Materials (con't.)	Dependence	Awareness, willingness, and interest	Helping adult	Independence with direction	Independence
2. Care of kitchen equipment c. large appliances					
B. Meals					
1. Preparation for meals					
a. placing plates, silverware					
b. placing napkins					
c. placing salad plate, glasses, and cups					
2. Serving a. bringing food to table					
b. clearing the table					
c. scraping					
d. stacking					
e. washing dishes					
f. drying dishes					
g. proper placement in cupboard					

	1	2	3	4	5
B. Meals (con't.)	Dependence	Awareness, willingness, and interest	Helping adult	Independence with direction	Independence
3. Preparation of food a. salads					
b. simple desserts					
c. cooked cereals					
d. toast					
e. cooking bacon					
f. cooking hamburgers					
g. using mixer					
h. using garbage disposal					
i. planning a menu					
C. Cleaning					
1. Picking up things					
2. Dusting					
3. Sweeping a. broom					
b. vacuum cleaner					

	1	2	3	4	5
C. Cleaning (con't.)	Dependence	Awareness, willingness, and interest	Helping adult	Independence with direction	Independence
4. Mopping					
5. Waxing floors					
6. Cleaning bathroom					
7. Bedmaking					
8. Washing windows					
D. Care of Clothing					
1. Gathering up clothes					
2. Sorting clothes					
3. Laundry a. washing small articles by hand					
b. using washer					
c. using dryer					
d. hanging out clothes					
e. folding clothes and putting away					

D. Care of Clothing (con't.)	1 Dependence	2 Awareness, willingness, and interest	3 Helping adult	4 Independence with direction	5 Independence
4. Sewing a. mending					
b. buttons					
c. darning					
d. hems					
5. Ironing a. sprinkling and starching					
b. flat pieces					
c. simple clothing					
E. Home Responsibilities or Odd Jobs					
1. Yard work a. planting					
b. watering					
c. sweeping walks and porch					
d. shoveling snow					

	1	2	3	4	5
E. Home Responsibilities or Odd Jobs (con't.)	Dependence	Awareness, willingness, and interest	Helping adult	Independence with direction	Independence
1. Yard work e. raking leaves					
2. Child care					
3. Washing car					
4. Cleaning garage					
5. Changing tires					
6. Care of bicycles					
7. Care of pets					
8. Errands a. letters					
b. groceries					
9. Folding and stuffing envelopes					
10. Stapling paper					
11. Delivering hand bills					

V. LEISURE TIME ACTIVITIES	1	2	3	4	5
A. Listening and Viewing Activities	Shows no interest or ability in the activity	Shows some interest in the activity	Participates in the activity with help or encouragement	Enjoys the activity but not skillful	Participates with ease and skill
1. Films and filmstrips					
2. Operating record player					
3. Movies					
4. Television					
5. Spectator sports					
6. Picture books and magazines					
7. Listening to music					
B. Art Activities					
1. Coloring					
2. Simple painting					
3. Paper mache					
4. Simple weaving					
5. Simple sewing (sewing cards, buttons)					
6. Molding and painting Plaster Paris objects					

	1	2	3	4	5
B. Art Activities (con't.)	Shows no interest or ability in the activity	Shows some interest in the activity	Participates in the activity with help or encouragement	Enjoys the activity but not skillful	Participates with ease and skill
7. Woodworking					
C. Music Activities					
1. Group singing					
2. Dancing					
3. Rhythm activities					
4. Playing a musical instrument					
D. Sports and Games					
1. Individual sports and exercising					
2. Active group and team games					
3. Quiet group games					
4. Puzzles					
5. Outdoor activities					

RATING SCALE FOR TMH PUPILS

Level IV

Revised Copy

Name of Pupil________________ Date__________ Rater__________

I. PHYSICAL GROWTH AND DEVELOPMENT	RATING
A. Motor Development	
1. Ball playing	
a. catching	
b. throwing	
2. Rhythm instruments	
B. Manipulative Development	
1. Cutting	
2. Finger painting	
3. Woodworking	
a. hammering	
b. sawing	
c. screwdriver	
4. Clay play	
C. Organized Games	
1. Bowling	
2. Dodge ball	
3. Kick ball	
4. Swimming	
5. Softball	
6. Basketball	
7. Badminton	
8. Relays	
9. Tennis	
10. Croquet	
11. Horseshoes	
12. Shuffleboard	
13. Ring toss	
14. Bean bag throw	
D. Musical Games and Rhythm	
1. Rhythm band	
2. Oh, Johnny, Oh	
3. Virginia Reel	
4. Ach Ja!	
5. I Put My Right Hand In	
6. Clapping	
7. Marching	
8. Listening to records	
9. Singing	

II. SELF CARE	RATING
A. Clothing	
1. Dressing	
a. shoe ties	
2. Care of clothing	
a. hanging up clothing	
b. shining shoes	
c. keeping clothes brushed	
B. Personal Hygiene	
1. Care of nose and mouth when coughing or sneezing	
2. Washing hands and face	
3. Toilet education	
4. Combing and brushing hair	
5. Brushing teeth	
6. Use of deodorant	
7. Using soap	
8. Shampooing and setting hair	
9. Feminine hygiene	
10. Appropriate makeup	
11. Care of nails	
12. Shaving	
13. Care of bathroom equipment	
14. Use and disposing tissues	
15. Going to barber shop	
C. Eating	
1. Skills	
a. spoon	
b fork	
c. knife	
d. drinking	
e. passing food	

	RATING
C. Eating (cont.)	
f. helping self to food	
g. using napkin	
h. care of lunchbox	
2. Personal manners	
a. sitting quietly at the table	
b. waiting for others to be served	
c. taking cookie or cracker nearest him	
d. chews quietly with lips closed	
e. chews thoroughly not gulping food	
f. waiting for others to be finished	
g. pulls chair out	
h. sits and pulls chair up to table	
i. gives Thanks	
j. use of please, thank you, and excuse me	
D. Safety	
1. In classroom	
a. avoidance of hot stove or radiator	
b. use of hot water	
c. holding on to bannisters	
d. using kitchen stove	
e. using household appliances	
f. non-edible substances	
2. Out of doors	
a. from car to school	
b. crossing street	

	RATING
D. Safety (cont.)	
c. on playground	
3. Outside the classroom in school building	
4. Riding in an automobile	
5. First aid for small cuts	
6. Reads and understands signs	
7. Telephoning Police	
8. Telephoning in case of fire	
9. Avoidance of unfamiliar persons or animals	
III. COMMUNICATIVE ABILITIES	
A. Listening and Speaking	
1. Listening or oral language	
2. Using telephone	
a. dialing	
b. talking	
3. Group activities	
a. field trips	
b. plays	
c. role playing	
d. story telling	
4. Conventional social patterns	
a. please	
b. thank you	
c. greeting	
d. introductions	
B. Identification	
1. Name	
2. Address	
3. Telephone number	
C. Word Recognition	
1. Own name	
2. Own address	
3. Own telephone number	

RATING

C. Word Recognition (cont.)
  4. Classmates names
  5. Informational words
    a. ladies
    b. gentlemen
    c. girls
    d. boys
    e. women
    f. men
    g. rest room
    h. toilet
    i. washroom
    j. exit
    k. lounge
    l. in
    m. out
    n. on
    o. off
    p. up
    q. down
    r. bus
    s. fire
    t. eggs
    u. milk
    v. mail
    w. water
    x. soap
    y. salt
    z. candy
    aa. school
    bb. sugar
  6. Safety words
    a. stop
    b. go
    c. walk
    d. wait
    e. look
    f. listen
    g. R.R. or railroad
    h. keep out
    i. poison
    j. enter
    k. crosswalk
    l. wet paint
    m. danger
    n. quiet
  7. Days of the week
    a. Sunday & Sun.
    b. Monday & Mon.
    c. Tuesday & Tues.

C. Word Recognition (cont.)
    d. Wednesday & Wed.
    e. Thursday & Thurs.
    f. Friday & Fri.
    g. Saturday & Sat.

D. Number, Time, and Money Concepts
  1. Number concept
  2. Time
  3. Money
    a. recognition
    b. making change

IV. WORK SKILLS AND HABITS
  A. Care of Equipment and Materials
    1. Care of household equipment
      a. broom and mop
      b. vacuum cleaner
      c. floor polisher
    2. Care of kitchen equipment
      a. mixer
      b. small appliances
      c. large appliances
  B. Meals
    1. Preparation of meals
      a. placing plates, silverware
      b. placing napkins
      c. placing salad plate, glasses and cups
    2. Serving
      a. bringing food to table
      b. clearing table

	RATING
B. Meals (cont.)	
c. scraping	
d. stacking	
e. washing dishes	
f. drying dishes	
g. proper placement in cupboard	
3. Preparation of food	
a. salads	
b. simple desserts	
c. cooked cereals	
d. toast	
e. cooking bacon	
f. cooking hamburgers	
g. using mixer	
h. using garbage disposal	
i. planning a menu	
C. Cleaning	
1. Picking up things	
2. Sorting clothes	
3. Laundry	
a. washing small articles by hand	
b. using washer	
c. using dryer	
d. hanging out clothes	
e. folding clothes and putting away	
4. Sewing	
a. mending	
b. buttons	
c. darning	
d. hems	
5. Ironing	
a. sprinkling and starching	
b. flat pieces	
c. simple clothing	
D. Home Responsibilities or Odd Jobs	
1. Yard work	
a. planting	
b. watering	
c. sweeping walks and porch	

	RATING
D. Home Responsibilities (cont.)	
d. shoveling snow	
e. raking leaves	
2. Child care	
3. Washing car	
4. Cleaning garage	
5. Changing tires	
6. Care of bicycles	
7. Care of pets	
8. Errands	
a. letters	
b. groceries	
9. Folding and stuffing envelopes	
10. Stapling paper	
11. Delivering hand bills	
V. LEISURE TIME ACTIVITIES	
A. Listening and Viewing Activities	
1. Films and filmstrips	
2. Operating record player	
3. Movies	
4. Television	
5. Spectator sports	
6. Picture books or magazines	
7. Listening to music	
B. Art Activities	
1. Coloring	
2. Simple painting	
3. Paper mache	
4. Simple weaving	
5. Simple sewing (sewing cards, buttons)	
6. Molding and painting	
7. Woodworking	
C. Music Activities	
1. Group singing	
2. Dancing	
3. Rhythm activities	

	RATING
C. Music Activities (cont.)	
4. Playing a musical instrument	
D. Sports and Games	
1. Individual sports and exercising	
2. Active group and team games	
3. Quiet group games	
4. Puzzles	
5. Outdoor activities	

INSTRUCTIONS FOR USING THE HH RATING SCALE FOR PUPILS

Complete the information blanks at the top of the rating scale for each pupil. After each item on the scale, place a rating from 1 to 5. The accompanying guide lists five descriptions of observable behavior that appear to be related to the sequential development of the skill named by that item. It would appear from the descriptions that each pupil will be rated at least a "1" on every item due to non-participation or not able to do the task. However, if a particular item does not apply to the pupil being rated, mark an X in the space opposite the item. (Example: Reads Hamlet X.)

Each item in section A of part VI must be checked either Yes or No according to the directions for those items in that part of the guide.

In all cases each pupil must receive a rating except in rare cases in a box marked with an X. Do not omit a rating of some kind for any one pupil.

WICHITA PUBLIC SCHOOLS
Research and Information Service Division

RATING GUIDE FOR HH PUPILS
Revised

I. SENSE TRAINING	1	2	3	4	5
A. Auditory					
1. Use of hearing aid a. putting it on	Will not allow it	Will let the teacher	Will help the teacher	With some help or direction	Independently
b. adjusting volume control					
c. inserting ear molds					
2. Awareness of sound a. music	Unaware of sound	Seems to hear the sound	Relates the sound to its source (record player, teacher, etc.)	Relates sound to original source (human voice, animal, airplane, car horn, etc.)	Identifies the sound correctly when it is presented in a list of sounds
b. voices					
c. airplanes					
d. telephones					
e. thunder					
f. horns					

A. Auditory (con't.)	1	2	3	4	5
2. Awareness of sound	Unaware of sound	Seems to hear the sound	Relates the sound to its source (record player, teacher, etc.)	Relates sound to original source (human voice, animal, airplane, car horn, etc.)	Identifies the sound correctly when it is presented in a list of sounds
g. animal noises					
h. drum					
i. loud toys					
j. squeal of hearing aid					
B. Visual	Not applicable	Poor	Fair	Adequate	Very good
1. Observation					
2. Imitation					
3. Attention					
4. Concentration					
5. Memory					
6. Reasoning					
7. Discrimination					

C. Tactile	1	2	3	4	5
	Not applicable	Poor	Fair	Adequate	Very good
1. Observation					
2. Imitation					
3. Attention					
4. Concentration					
5. Memory					
6. Reasoning					
7. Discrimination					
II. SOCIALIZATION					
A. Ability to	Never	Occasionally	About $\frac{1}{2}$ the time	Frequently	Always
1. Stay with group activities					
2. Get along with peers					
3. Change to new activity					
4. Act fairly and take turns					
5. Be pleasant and courteous toward others					
6. Share materials and equipment					
7. Willingly help others					

A. Ability to (con't.)	1	2	3	4	5
8. Accept disagreement	Never	Occasionally	About $\frac{1}{2}$ the time	Frequently	Always
9. Accept constructive criticism					
III. RESPONSIBILITY					
A. Ability to					
1. Concentrate on and finish task assigned					
2. Comply with adult directions					
3. Properly care for school and/or other's property					
4. Be independent from teachers help and/or attention					
IV. BASIC LEARNING SKILLS					
A. Manipulative Development	Lack of interest	Exploration	Trial & Error	Some degree of ability	Able to do task effectively
1. Cutting					
2. Drawing					
3. Coloring					

A. Manipulative Development (con't.)	1 Lack of interest	2 Exploration	3 Trial & Error	4 Some degree of ability	5 Able to do task effectively
4. Finger painting					
5. Clay or dough					
6. Pasting					
7. Bead stringing					
8. Pegs					
9. Cars, trucks and trains (toys)					
10. Block building					
11. Puzzles a. two piece					
b. three piece					
c. five piece or more					
B. Matching	1	2	3	4	5
1. Shapes a. objects					
b. geometric shapes					
2. Size					
3. Colors a. with the same color					
b. with the spoken name					

B. Matching (con't.)

c. with the printed name	Lack of interest	Exploration	Trial & Error	Some degree of ability	Able to do task effectively
4. Numbers a. 1 - 5					
b. pictured groups					
c. symbols					
C. Vocal Skills	Unacceptable	Poor	Average	Good	Very good
1. Voice quality					
2. Articulation					
3. Syllabication					
4. Phrasing					
5. Rhythm					
6. Accent					
7. Inflection					
8. Pitch and intonation					
9. Spontaneity					
10. Fluency					
D. Reading					
1. Reading readiness	No interest	Left to right habit	Discriminates between letter & words	Recognition of printed words	Able to read effectively

E. Reading Materials	1	2	3	4	5
1. Scott-Foresman Pre-Primer	Not ready for the book	Ready to begin the book	Doing the book but having difficulty	Doing the book without undue difficulty	Has already finished the book
2. Open Court Lessons 1 - 8					
3. Open Court Lessons 9 - 12					
4. Scott-Foresman 1st Reader					
Supplementary Reading Materials 5. ______________					
6. ______________					
7. ______________					
. Writing Readiness					
1. Figures a. vertical line	Unable to do task	Attempts to trace but cannot stay on the lines	Traces the figure neatly and easily	Attempts to draw the figure, getting a recognizable shape	Draws the figure neatly and accurately
b. horizontal line					

F. Writing Readiness (con't.)	1	2	3	4	5
1. Figures c. circle	Unable to do task	Attempts to trace but cannot stay on the lines	Traces the figure neatly and easily	Attempts to draw the figure, getting a recognizable shape	Draws the figure neatly and accurately
d. square					
e. rectangle					
f. triangle					
g. diamond					
2. Alphabet	Unable to do	Matching shapes	Tracing	Able to write	Meaningful use
G. Arithmetic Concepts					
1. Quantity a. numbers	Has no concept	One versus two	Counting	Grouping	Regrouping
b. size		Gross assortment by size	Matching	Series	Patterns
c. time		Has concept of morn & afternoon	Tells time by the hour	Tells time by the half hour	Tells time independently

G. Arithmetic Concepts (con't.)	1	2	3	4	5
2. One or 1	Lip-reads the number	Says the number	Knows the meaning of the number	Sight reads the printed word, numeral or both	Writes the numeral
3. Two or 2					
4. Three or 3					
5. Four or 4					
6. Five or 5					
7. Six or 6					
8. Seven or 7					
9. Eight or 8					
10. Nine or 9					
11. Ten or 10					
H. Arithmetic Operations					
1. Addition	Unable to do	Is aware of operation	Operates with some 1 digit numbers	Operates with some 2 digit numbers	Operates with some numbers 3 or more digits
2. Subtraction					
3. ______________					

I. Arithmetic Materials	1	2	3	4	5
	Not ready for the book	Ready to begin the book	Doing the book now but having difficulty	Doing the book without undue difficulty	Has already finished the book
1. Primer					
2. Book one					
Supplementary Arithmetic Materials 3. ______					
4. ______					
5. ______					
J. Lipreading and Speech Vocabulary					
1. Verbs a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. ½ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. ½ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind

J. Lipreading and Speech Vocabulary (con't.)

have has went walked made gave pushed lost washed put on looked at bought

fall put ate saw came opened found tore took off played with hopped ran

cut drank spilled shut moved pulled dropped threw away

2. Commands	1	2	3	4	5
a. speech	Apparently cannot say any of the phrases listed below	Can say a few of the phrases listed below	Can say approx. ½ the phrases listed below	Can say most or all of the phrases listed below	Can say all the phrases listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the phrases listed below	Can lip-read a few of the phrases listed below	Can lip-read approx. ½ the phrases listed below	Can lip-read most or all of the phrases listed below	Can lip-read all phrases listed below and others of this kind

jump bow fall run hop walk please come cough stand up sit down turn

comb your hair cry brush your teeth open the door shut the door clap your hands

wash your hands throw the ball march skip fold your arms laugh dance wash your face

shut your eyes wave bounce the ball fold your hands put on your aid get your coat

eat your ____ drink your ____ look stand behind your chair put the toys away go to sleep

throw a kiss sit on the floor shake hands with ____ draw a ____ color the ____

look at ____ look out the window it's time for lunch get your lunch box

J. Lipreading and Speech Vocabulary (con't.)

	1	2	3	4	5
3. Foods a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. $\frac{1}{2}$ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. $\frac{1}{2}$ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind

an apple   a banana   some beans   a birthday cake   some bread   some tea   some butter

some cake   some candy   some cereal   a cookie   some corn   some crackers   some pop   an egg

some ice cream   some jelly   a sucker   some meat   an orange   some peas   some popcorn

a potato   some pudding   a sandwich   some toast   some juice   some water   a nut   a hot dog

bacon   a roll   a hamburger   a pear   some sugar   some applesauce   a tomato   a lemon

some lettuce   pickles   potato chips   some olives   some celery   iced tea   fried chicken

some turkey   apple juice   orange juice   some prunes   some salad   some soup   some coffee

some milk   salt and pepper   french fries   some gum   a bun   some gravy   a peach   a pineapple

some cheese   some cherries   a grape   a grapefruit   a cupcake   some pancakes   some peanut

butter   some rice   an onion   hot tea   chicken   tomato juice   grape juice   pineapple juice

grapefruit juice   prune juice   ham   some beets   some carrots

7

J. Lipreading and Speech Vocabulary (con't)

	1	2	3	4	5
4. Things to wear a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. $\frac{1}{2}$ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. $\frac{1}{2}$ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind
a coat a dress a bathrobe a blouse a bow a cap a hat a jacket mittens pajamas pants a raincoat a rain hat boots a scarf a skirt shoes a belt a slip a jumper a shirt house shoes socks stockings a sweater a tie underpants undershirt suit cowboy boots cowboy hat cowboy suit T-shirt jeans shorts apron beads a watch a ring a bracelet gloves a pin glasses playclothes a purse an umbrella					
5. People a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. $\frac{1}{2}$ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind

J. Lipreading and Speech Vocabulary (con't.)

	1	2	3	4	5
5. People a. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. $\frac{1}{2}$ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind
a man a woman a boy a girl a baby Daddy Mother nurse children a dentist grandmother we me grandfather brother sister policeman fireman doctor mailman milkman teacher saleslady I she salesman trashman carpenter barber soldier own name teacher's name classmates' names he you					
6. Parts of the body a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. $\frac{1}{2}$ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. $\frac{1}{2}$ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind
arm nose feet eye tooth neck thumb leg head face teeth elbow toe ears fingers hair legs throat hands knee mouth foot heel ankle back fingernail					

J. Lipreading and Speech Vocabulary (con't.)	1	2	3	4	5
7. Weather a. speech	Apparently cannot say any of the phrases listed below	Can say a few of the phrases listed below	Can say approx. $\frac{1}{2}$ the phrases listed below	Can say most or all of the phrases listed below	Can say all the phrases listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the phrases listed below	Can lip-read a few of the phrases listed below	Can lip-read approx. $\frac{1}{2}$ the phrases listed below	Can lip-read most or all of the phrases listed below	Can lip-read all the phrases listed below and others of this kind

sun snow rain summer fall winter spring It is raining. It is cloudy.

The sun is shining. It is snowing. It is windy.

8. Adjective a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. $\frac{1}{2}$ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. $\frac{1}{2}$ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind

big little large small happy sad sore sleepy cold hot new old sick well

sorry mad clean dirty good bad high low cross warm rough smooth long

J. Lipreading and Speech
Vocabulary (con't.)

short first last early late wet dry wide narrow pretty ugly quiet noisy

wrong right empty full loud soft fast slow light dark heavy

	1	2	3	4	5
9. Expressions a. speech	Apparently cannot say any of the phrases listed below	Can say a few of the phrases listed below	Can say approx. ½ the phrases listed below	Can say most or all of the phrases listed below	Can say all the phrases listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the phrases listed below	Can lip-read a few of the phrases listed below	Can lip-read approx. ½ the phrases listed below	Can lip-read most or all of the phrases listed below	Can lip-read all phrases listed below and others of this kind

hello bye-bye I love you. I love ____. I am sorry. Wait. Let me see. Stop. Hi, ____. Look. Oh, no! Hurry. It's all gone. Be careful. Good night. I forgot. I know. I don't know. That's hot. That's cold. That's awful. That's good. That's pretty. That's mine. Thank you. You are welcome. That's too bad. I want some ____. I like that. That's okay. I had a good time. Please, help me. That's yours. Good morning. I want to play. Don't bother me. Whose are these? Watch me. Be quiet. Sleepy head. May I ____? May I go to the bathroom? May I play? May I get a drink? May I sharpen my pencil? Please, move. Yes. No. I love the flag. Happy Easter. Merry Christmas. Happy New Year.

J. Lipreading and Speech Vocabulary (con't.)

	1	2	3	4	5
10. Calendar a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. $\frac{1}{2}$ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. $\frac{1}{2}$ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind
yesterday today tomorrow morning afternoon Sunday Monday Tuesday Wednesday Thursday Friday Saturday January February March April May June July August September October November December					
11. Toys a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. $\frac{1}{2}$ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. $\frac{1}{2}$ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind

J. Lipreading and Speech
Vocabulary (con't.)

a ball a balloon a car a swing a doll a doll bed a doll buggy a doll house

a teeter-totter a tricycle a boat a wagon a kite a sled a truck a tractor

a jungle gym skates a skateboard a bat games some jacks a gun an airplane a bus

a drum a train some marbles a sand box a sand pail a swimming pool a jump rope blocks

a top a slide a baseball a football a tea set a basketball

	1	2	3	4	5
12. Animals a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. ½ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. ½ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind

a bear a sheep a mouse a horse a duck a turtle an elephant a frog a donkey

a monkey a tiger a chicken a bee a squirrel a pig a lamb a worm a puppy a wolf

a kangaroo a giraffe a zebra a fish a cow a bird a turkey a rabbit a calf

a deer a hen a butterfly a seal a camel a fly a dog a cat a colt a pony

a goat a rooster a kitten a snake a lion

J. Lipreading and Speech Vocabulary (con't.)

	1	2	3	4	5
13. Things out doors a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. $\frac{1}{2}$ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. $\frac{1}{2}$ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind
the sun the moon a star the clouds a tree a plant a leaf a flower a farm the grass a house a barn a park a nest the playground a playhouse a snowman the yard the sidewalk the street					
14. Places to go a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. $\frac{1}{2}$ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. $\frac{1}{2}$ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind
home church school downtown the movie the zoo					

J. Lipreading and Speech Vocabulary (con't.)

	1	2	3	4	5
15. Things we use a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. $\frac{1}{2}$ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. $\frac{1}{2}$ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind

a brush   a comb   a bed   a blanket   a bathtub   a chair   some bubble bath   a fireplace

the floor   a handkerchief   a chimney   a napkin   a radio   hand lotion   a record   a mirror

hangers   a rug   a stool   a nail file   a table   soap   steps   a toothbrush   the telephone

toothpaste   the window   a towel   a television   a washcloth   a knife   a bib   a fork

a bowl   a spoon   a cup   a tablecloth   a saucer   a paper bag   a pitcher   a plate   a bell

a door   a basket   a flag   a chalkboard   a card   a coloring book   chalk   some crayons

an eraser   a paintbrush   paints   some paper   a pencil   a rubberband   scissors   thumbtacks

scotchtape   wastebasket   paper clips   a book   some money   a pillow   a desk   a clock

a shovel   a bucket

J. Lipreading and Speech Vocabulary (con't.)

	1	2	3	4	5
16. Rooms a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. ½ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. ½ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind
kitchen bedroom bathroom living room					
17. Furniture a. speech	Apparently cannot say any of the words listed below	Can say a few of the words listed below	Can say approx. ½ the words listed below	Can say most or all of the words listed below	Can say all the words listed below and others of this kind
b. lipreading	Apparently cannot lip-read any of the words listed below	Can lip-read a few of the words listed below	Can lip-read approx. ½ the words listed below	Can lip-read most or all of the words listed below	Can lip-read all the words listed below and others of this kind

chair coffee table lamp rug sofa TV blinds drapes end table light piano

pictures broom brush refrigerator sink stove table curtains dishcloth dishpan

dishtowel dustpan mop shade bed wastebasket pillow pillowslip bedspread blinds

J. Lipreading and Speech
Vocabulary (con't.)

clock dresser mirror telephone bathtub bathmat shower stool toilet paper

soap toothbrush toothpaste

V. LANGUAGE DEVELOPMENT THROUGH SPEECH ELEMENTS

A. Speech Elements	1 No Response	2 Reproduces a sound	3 Lip-reads the element and identifies it on the chart	4 Lip-reads the element and reproduces the sounds	5 Blends the sound together with other sounds
1. wh					
2. p-					
3. -p					
4. t^1h					
5. r					
6. s					
7. ar					
8. oo^1					
9. t-					
10. -t					

A. Speech Elements (con't.)

	1 No Response	2 Reproduces a sound	3 Lip-reads the element and identifies it on the chart	4 Lip-reads the element and reproduces the sounds	5 Blends the sound together with other sounds
11. m					
12. ou					
13. -u-					
14. k-					
15. t^2h					
16. aw					
17. b-					
18. -b					
19. ee					
20. l					
21. -a-					
22. i-e					
23. w-					
24. n					
25. -d					

A. Speech Elements (con't.)

	1	2	3	4	5
	No Response	Reproduces a sound	Lip-reads the element and identifies it on the chart	Lip-reads the element and reproduces the sounds	Blends the sound together with other sounds
26. r-					
27. u-e					
28. -e-					
29. o-e					
30. g-					
31. -g					
32. oi					
33. v					
34. y-					
35. ur					
36. -o-					
37. OO^2					
38. thr					
39. -i-					
40. a-e					

A. Speech Elements (con't.)	1	2	3	4	5
	No Response	Reproduces a sound	Lip-reads the element and identifies it on the chart	Lip-reads the element and reproduces the sounds	Blends the sound together with other sounds
41. sh					
42. x					
43. z					
44. h-					
45. -ng					
46. ch					
47. qu					
48. zh					
49. i					
B. Speech Sounds					
1. Babbling	No Sound				Meaningful Sound
2. Jargon	No Sound				Attempt to Communicate

VI. LANGUAGE DEVELOPMENT THROUGH CONCEPTS

A. Language Concepts

	No	Yes
1. Who		
2. What		
3. What do (verb)		
4. How many		
5. What color		
6. When		
7. Where		
8. What kind		
9. How		
10. Whose		
11. Which one		
12. Simple sentence		
13. Question form		
14. Statement form		

The child should be rated No on concepts 1 - 11 if it is not apparent through his/her actions or speech that he/she understands the concept, and rated Yes if some understanding of the concept is apparent.

The child should be rated Yes on concepts 12 - 14 when he/she is capable of understanding and/or using language in these forms.

WICHITA PUBLIC SCHOOLS
RESEARCH AND INFORMATION SERVICE DIVISION

RATING SCALE FOR HH PUPILS
Revised Copy

Name of Pupil ____________________ Date ________ Rater ________________

Class ________________ Age _______

I. SENSE TRAINING	RATING
A. Auditory	
1. Use of hearing aid	
a. putting it on	
b. adjusting vol. control	
c. inserting ear molds	
2. Awareness of sound	
a. music	
b. voices	
c. airplanes	
d. telephones	
e. thunder	
f. horns	
g. animal noises	
h. drum	
i. loud toys	
j. squeal of hearing aid	
B. Visual	
1. Observation	
2. Imitation	
3. Attention	
4. Concentration	
5. Memory	
6. Reasoning	
7. Discrimination	
C. Tactile	
1. Observation	
2. Imitation	
3. Attention	
4. Concentration	
5. Memory	
6. Reasoning	
7. Discrimination	

II. SOCIALIZATION	RATING
A. Ability to	
1. Stay with group activities	
2. Get along with peers	
3. Change to new activity	
4. Act fairly and take his turn	
5. Be pleasant and courteous toward others	
6. Share materials and equipment	
7. Willingly help others	
8. Accept disagreement	
9. Accept constructive criticism	
III. RESPONSIBILITY	
A. Ability to	
1. Concentrate on and finish task	
2. Comply with adult directions	
3. Properly care for school and/or other's property	
4. Be independent from teacher help and/or attention	
IV. BASIC LEARNING SKILLS	
A. Manipulative Development	
1. Cutting	
2. Drawing	
3. Coloring	

	RATING
A. Manipulative Development (cont.)	
4. Finger painting	
5. Clay or dough	
6. Pasting	
7. Bead stringing	
8. Pegs	
9. Cars, trucks, and trains (toys)	
10. Block building	
11. Puzzles	
a. two piece	
b. three piece	
c. five piece or more	
B. Matching	
1. Shapes	
a. objects	
b. geometric shapes	
2. Size	
3. Colors	
a. with the same color	
b. with the spoken name	
c. with the printed name	
4. Numbers	
a. 1 -5	
b. pictured groups	
c. symbols	
C. Vocal Skills	
1. Voice quality	
2. Articulation	
3. Syllabication	
4. Phrasing	
5. Rhythm	
6. Accent	
7. Inflection	
8. Pitch and intonation	
9. Spontaneity	
10. Fluency	
D. Reading	
1. Reading readiness	

	RATING
E. Reading Materials	
1. Scott-Foresman Pre-Primer	
2. Open Court Lessons 1 - 8	
3. Open Court Lessons 9 - 12	
4. Scott-Foresman 1st Reader	
Supplementary Reading Materials	
5.	
6.	
7.	
F. Writing Readiness	
1. Figures	
a. vertical line	
b. horizontal line	
c. circle	
d. square	
e. rectangle	
f. triangle	
g. diamond	
2. Alphabet	
G. Arithmetic Concepts	
1. Quantity	
a. numbers	
b. size	
c. time	
2. One or 1	
3. Two or 2	
4. Three or 3	
5. Four or 4	
6. Five or 5	
7. Six or 6	
8. Seven or 7	
9. Eight or 8	
10. Nine or 9	
11. Ten or 10	
H. Arithmetic Operations	
1. Addition	
2. Subtraction	
3.	
4.	

		RATING
I.	Arithmetic Materials	
	1. Primer	
	2. Book one	
	Supplementary Arithmetic Materials	
	3.	
	4.	
	5.	
J.	Lipreading and Speech Vocabulary	
	1. Verbs	
	a. speech	
	b. lipreading	
	2. Commands	
	a. speech	
	b. lipreading	
	3. Foods	
	a. speech	
	b. lipreading	
	4. Things to wear	
	a. speech	
	b. lipreading	
	5. People	
	a. speech	
	b. lipreading	
	6. Parts of the body	
	a. speech	
	b. lipreading	
	7. Weather	
	a. speech	
	b. lipreading	
	8. Adjective	
	a. speech	
	b. lipreading	
	9. Expressions	
	a. speech	
	b. lipreading	
	10. Calendar	
	a. speech	
	b. lipreading	
	11. Toys	
	a. speech	
	b. lipreading	
	12. Animals	
	a. speech	
	b. lipreading	
	13. Things out doors	
	a. speech	
	b. lipreading	

		RATING
J.	Lipreading and Speech Vocabulary (cont.)	
	14. Places to go	
	a. speech	
	b. lipreading	
	15. Things we use	
	a. speech	
	b. lipreading	
	16. Rooms	
	a. speech	
	b. lipreading	
	17. Furniture	
	a. speech	
	b. lipreading	
V.	LANGUAGE DEVELOPMENT THROUGH SPEECH ELEMENTS	
A.	Speech Elements	
	1. wh	
	2. p-	
	3. -p	
	4. t^{1}h	
	5. f	
	6. s	
	7. ar	
	8. oo^1	
	9. t-	
	10. -t	
	11. m	
	12. ou	
	13. -u-	
	14. k-	
	15. t^{2}h	
	16. aw	
	17. b-	
	18. -b	
	19. ee	
	20. l	
	21. -a-	
	22. i-e	
	23. w-	
	24. n	
	25. -d	
	26. r-	
	27. u-e	
	28. -e-	
	29. o-e	
	30. g-	
	31. -g	
	32. oi	
	33. v	

	RATING
A. Speech Elements (cont.)	
34. y-	
35. ur	
36. -o-	
37. OO^2	
38. thr	
39. -i-	
40. a-e	
41. sh	
42. x	
43. z	
44. h-	
45. -ng	
46. ch	
47. qu	
48. zh	
49. i	
B. Speech Sounds	
1. Babbling	
2. Jargon	
VI. LANGUAGE DEVELOPMENT THROUGH CONCEPTS	
A. Language Concepts No	Yes
1. Who	
2. What	
3. What do (verb)	
4. How many	
5. What color	
6. When	
7. Where	
8. What kind	
9. How	
10. Whose	
11. Which one	
12. Simple sentence	
13. Question form	
14. Statement form	

WICHITA PUBLIC SCHOOLS
RESEARCH AND INFORMATION SERVICE DIVISION

QUESTIONNAIRE TO SCHOOL NURSES OR SPEECH CLINICIANS FOR EVALUATION OF THE 1967 - 68 TITLE III PROJECT

Check the appropriate line for your position.
Nurse______
Speech Clinician______

For each of the following items, check the appropriate box regarding the referring of pupils to the Diagnostic Center.

		Yes	No
1. a.	referrals handled promptly enough	☐	☐
b.	"feedback" information back in a reasonable time	☐	☐
c.	no response to some referrals	☐	☐
d.	received verbal reports only	☐	☐
e.	recommendations made were clearly stated	☐	☐
f.	reports received by the school appeared to be complete	☐	☐
g.	information returned appeared to be useful	☐	☐

2. Place a check in the box to the right of each in-service training program or workshop you attended this year. Then rate the programs you attended on the same line that you checked for attendance.

	DATE	PROGRAM		RATING Good	Fair	Poor
a.	9-14-67	Music Therapy & Use of Music with Exceptional Children	☐	☐	☐	☐
b.	9-21, 22, & 23	Frostig Materials	☐	☐	☐	☐
c.	9-28-67	Language Master Cards	☐	☐	☐	☐
d.	10-4 & 5	Resource Workshop for Secondary People (Language Arts, Social Studies, & Science)	☐	☐	☐	☐

				Good	Fair	Poor
e.	10-13-67	Secondary Resource Materials Seminar (Language Arts, Social Studies, & Science)	☐	☐	☐	☐
f.	10-17-67	Follow-up Frostig Materials	☐	☐	☐	☐
g.	10-19-67	Follow-up Frostig Materials	☐	☐	☐	☐
h.	11-21-67	Follow-up Frostig Materials	☐	☐	☐	☐
i.	11-21-67	Developmental Visual Perceptions	☐	☐	☐	☐
j.	1-30 & 31-68	The Subordination of Teaching & Learning	☐	☐	☐	☐
k.	1-30-68	Education for Sexuality (County & Parochial)	☐	☐	☐	☐
l.	2-12-68	Administrators Seminar - Education for Sexuality	☐	☐	☐	☐
m.	2-13-68	Teachers Seminar - Education for Sexuality	☐	☐	☐	☐
n.	2-14-68	Counselors Seminar - Education for Sexuality	☐	☐	☐	☐
o.	2-15-68	Nurses Seminar - Education for Sexuality	☐	☐	☐	☐
p.	2-23 & 24	Reading Improvement K-12	☐	☐	☐	☐
q.	2-29-68	Speech and Language Disturbances	☐	☐	☐	☐

3. Include any further comments or other reactions that you wish about any phase of the Title III Project.

____

____

____

WICHITA PUBLIC SCHOOLS
RESEARCH AND INFORMATION SERVICE DIVISION

QUESTIONNAIRE TO SCHOOL COUNSELORS FOR EVALUATION OF THE 1967 - 68 TITLE III PROJECT

For each of the following items, check the appropriate box, regarding referring of pupils to the Diagnostic Center.

			Yes	No
1.	a.	referrals handled promptly enough	☐	☐
	b.	referral form more difficult to get completed than old form	☐	☐
	c.	"feedback" information back in a reasonable amount of time	☐	☐
	d.	no response to some referrals	☐	☐
	e.	received verbal report only	☐	☐
	f.	recommendations made were clearly stated	☐	☐
	g.	reports received by the school appeared to be complete	☐	☐
2.	a.	Have any pupils in your school (schools) been in a special class (Title III) and returned to a regular class?	☐	☐
	b.	If "Yes" on the above question, have you observed differences in school adjustment for those pupils?	☐	☐
3.	a.	Have any pupils in your school (schools) been assigned medical and/or psychological help through the Diagnostic Center?	☐	☐
	b.	If "Yes" on the above question, have you observed differences in school adjustment for those pupils?	☐	☐
4.	a.	Have the programs of in-service training (workshops) this year included topics of greater interest to you than programs of previous year?	☐	☐

5. Place a check in the box to the right of each in-service training program or workshop you attended this year. Then rate the programs you attended on the same line that you checked for attendance.

DATE	PROGRAM	RATING			
			Good	Fair	Poor
a. 9-14-67	Music Therapy & Use of Music with Exceptional Children	☐	☐	☐	☐
b. 9-21, 22, & 23	Frostig Materials	☐	☐	☐	☐
c. 9-28-67	Language Master Cards	☐	☐	☐	☐
d. 10-4 & 5	Resource Workshop for Secondary People (Language Arts, Social Studies, & Science)	☐	☐	☐	☐
e. 10-13-67	Secondary Resource Materials Seminar (Language Arts, Social Studies, & Science)	☐	☐	☐	☐
f. 10-17-67	Follow-up Frostig Materials	☐	☐	☐	☐
g. 10-19-67	Follow-up Frostig Materials	☐	☐	☐	☐
h. 11-21-67	Follow-up Frostig Materials	☐	☐	☐	☐
i. 11-21-67	Developmental Visual Perceptions	☐	☐	☐	☐
j. 1-30 & 31-68	The Subordination of Teaching & Learning	☐	☐	☐	☐
k. 1-30-68	Education for Sexuality (County & Parochial)	☐	☐	☐	☐
l. 2-12-68	Administrators Seminar - Education for Sexuality	☐	☐	☐	☐

				Good	Fair	Poor
m.	2-13-68	Teachers Seminar - Education for Sexuality	☐	☐	☐	☐
n.	2-14-68	Counselors Seminar - Education for Sexuality	☐	☐	☐	☐
o.	2-15-68	Nurses Seminar - Education for Sexuality	☐	☐	☐	☐
p.	2-23 & 24	Reading Improvement K-12	☐	☐	☐	☐
q.	2-29-68	Speech and Language Disturbances	☐	☐	☐	☐

5. How many referrals from your school (schools) were processed by you to be sent to the Diagnostic Center this past year?________________

6. Include any comments or reactions that you wish about any phase of the Title III Project.

____

____

____

WICHITA PUBLIC SCHOOLS
RESEARCH AND INFORMATION SERVICE DIVISION

QUESTIONNAIRE TO PARENTS FOR EVALUATION OF THE 1967 - 68 TITLE III PROJECT

1. Does your child attend one of the special supplementary classrooms or his regular classroom?
   SPECIAL__________ REGULAR__________

2. Do you feel that you were allowed to participate as much as you should in the formulation of your child's education plan?
   YES________ NO________

How would you rate the following items regarding the Special Education Diagnostic and Resource Center?

	Very Helpful	Helpful	Of Little Help	No Help	Detrimental
3. The information that you obtained as a result of your child's evaluation at the Center.					
4. Interviews with the Center's social worker.					
5. Information about available programs for your child.					
6. Counseling related to your child's special needs.					
7. Attitude and cooperation of the Center personnel.					
8. Special meetings or programs for parents.					
9. Services of a clinical psychiatrist contracted by the Center.					
10. Medical services contracted by the Center.					

How would you describe the change in the following items since your child was referred to the Special Education Diagnostic and Resource Center?

	Much Improved	Improved	Improved Very Little	Not Improved	Worse Than Before
11. Your child's attitude toward school.					
12. Your child's attitude at home.					
13. Your child's progress at school.					
14. The teachers' understanding of your child's special needs.					

WICHITA PUBLIC SCHOOLS
RESEARCH AND INFORMATION SERVICE DIVISION

QUESTIONNAIRE TO NON-TITLE III TEACHERS FOR EVALUATION OF THE 1967 - 68 TITLE III PROJECT

How would you rate the following services provided by the Diagnostic Center?

		Very Helpful	Helpful	Of Little Help	No Help	Detri-mental
1.	a. Information that you received from the Center concerning individual children.	☐	☐	☐	☐	☐
	b. The recommendations and educational plans formulated by the Center Staff for children referred to the Center.	☐	☐	☐	☐	☐
	c. Services provided by the consultants (art, music, physical education, and Resource).	☐	☐	☐	☐	☐
	d. Materials and/or equipment available from the Resource Center.	☐	☐	☐	☐	☐
	e. In-service training (workshops) provided by the Center.	☐	☐	☐	☐	☐

2. Place a check in the box to the right of each in-service training program or workshop you attended this year. Then rate the programs you attended on the same line that you checked for attendance.

	DATE	PROGRAM		RATING		
				Good	Fair	Poor
a.	9-14-67	Music Therapy & Use of Music with Exceptional Children	☐	☐	☐	☐
b.	9-21, 22, &23	Frostig Materials	☐	☐	☐	☐

				Good	Fair	Poor
c.	9-28-67	Language Master Cards	☐	☐	☐	☐
d.	10-4 & 5	Resource Workshop for Secondary People (Language Arts, Social Studies, & Science)	☐	☐	☐	☐
e.	10-13-67	Secondary Resource Materials Seminar (Language Arts, Social Studies, & Science)	☐	☐	☐	☐
f.	10-17-67	Follow-up Frostig Materials	☐	☐	☐	☐
g.	10-19-67	Follow-up Frostig Materials	☐	☐	☐	☐
h.	11-21-67	Follow-up Frostig Materials	☐	☐	☐	☐
i.	11-21-67	Developmental Visual Perceptions	☐	☐	☐	☐
j.	1-30 & 31-68	The Subordination of Teaching & Learning	☐	☐	☐	☐
k.	1-30-68	Education for Sexuality (County & Parochial)	☐	☐	☐	☐
l.	2-12-68	Administrators Seminar - Education for Sexuality	☐	☐	☐	☐
m.	2-13-68	Teachers Seminar - Education for Sexuality	☐	☐	☐	☐
n.	2-14-68	Counselors Seminar - Education for Sexuality	☐	☐	☐	☐
o.	2-15-68	Nurses Seminar - Education for Sexuality	☐	☐	☐	☐
p.	2-23 & 24	Reading Improvement K-12	☐	☐	☐	☐
q.	2-29-68	Speech and Language Disturbances	☐	☐	☐	☐

3. a. Do you have a student in your class who was formerly in a special Title III classroom? Yes______ No______

b. If "yes" on the above question, please rate the student on the following items:

	No Difference	A Little Improvement	Improved	Much Improved
1. Student's attitude toward you.				
2. Student's attitude toward self.				
3. Student's attitude toward school.				
4. Student's ability to progress in school work.				

4. Please indicate whether your classroom is a regular or special education classroom and at what grade level (grade level and subjects) that you teach.

____

____

5. Please include any comments or reactions of yourself and others that you care to, regarding the Diagnostic Center and the services it provides.

____

____

____

WICHITA PUBLIC SCHOOLS
RESEARCH AND INFORMATION SERVICE DIVISION

QUESTIONNAIRE TO PRINCIPALS FOR EVALUATION OF THE 1967 - 68 TITLE III PROJECT

How would you rate the following services provided by the Diagnostic Center in terms of meeting special needs of handicapped children in your school?

	Very Helpful	Helpful	Of Little Help	No Help	Detrimental
1. a. Diagnostic evaluation of pupils referred to the Center.	☐	☐	☐	☐	☐
b. Recommendations for placement (if any) following the evaluation.	☐	☐	☐	☐	☐
c. Recommendations for special procedures, techniques, or materials (if any) following evaluation.	☐	☐	☐	☐	☐
d. Parental involvement in formulating an educational plan for their handicapped child.	☐	☐	☐	☐	☐
e. Services provided for your teachers by the consultants or social workers.	☐	☐	☐	☐	☐
f. Materials and/or equipment available for use or loan to your building.	☐	☐	☐	☐	☐
g. In-service training meetings or workshops held at the Center (or at your school by the Center Staff).	☐	☐	☐	☐	☐

2. a. Did you or members of your staff receive special materials from the resource consultant? Yes ______ No______

b. If "yes" on the above question, then rate the use of the following types of materials and/or equipment only if you received it.

	Very Helpful	Helpful	Of Little Help	No Help	Detrimental
1. Peabody Language Development Kit					
2. Films					
3. Film strips					
4. Language Master					
5. Special books for pupils					
6. Special books for teachers					
7. Frostig materials					
8. Tapes and/or records					
9. Other special materials, please list below and rate					
____________________					
____________________					

3. Have any of the following effects developed as a result of the services provided by the Diagnostic Center?

	Yes	No
a. More attention given to the individual child.	☐	☐
b. More awareness of special services for students.	☐	☐
c. More testing and/or evaluation at your building	☐	☐
d. More awareness of help available for working with handicapped pupils in the regular classroom.	☐	☐

		Yes	No
e.	More use of audio-visual aids.	☐	☐
f.	More interest in new materials.	☐	☐

4. Place a check in the box to the right of each in-service training program or workshop you attended this year. Then rate the programs you attended on the same line that you checked for attendance.

	DATE	PROGRAM		RATING		
				Good	Fair	Poor
a.	9-14-67	Music Therapy & Use of Music with Exceptional Children	☐	☐	☐	☐
b.	9-21, 22, & 23	Frostig Materials	☐	☐	☐	☐
c.	9-28-67	Language Master Cards	☐	☐	☐	☐
d.	10-4 & 5	Resource Workshop for Secondary People (Language Arts, Social Studies, & Science)	☐	☐	☐	☐
e.	10-13-67	Secondary Resource Materials Seminar (Language Arts, Social Studies, & Science)	☐	☐	☐	☐
f.	10-17-67	Follow-up Frostig Materials	☐	☐	☐	☐
g.	10-19-67	Follow-up Frostig Materials	☐	☐	☐	☐
h.	11-21-67	Follow-up Frostig Materials	☐	☐	☐	☐
i.	11-21-67	Developmental Visual Perceptions	☐	☐	☐	☐
j.	1-30 & 31-68	The Subordination of Teaching & Learning	☐	☐	☐	☐

				Good	Fair	Poor
k.	1-30-68	Education for Sexuality (County & Parochial)	☐	☐	☐	☐
l.	2-12-68	Administrators Seminar - Education for Sexuality	☐	☐	☐	☐
m.	2-13-68	Teachers Seminar - Education for Sexuality	☐	☐	☐	☐
n.	2-14-68	Counselors Seminar - Education for Sexuality	☐	☐	☐	☐
o.	2-15-68	Nurses Seminar - Education for Sexuality	☐	☐	☐	☐
p.	2-23 & 24	Reading Improvement K-12	☐	☐	☐	☐
q.	2-29-68	Speech and Language Disturbances	☐	☐	☐	☐

5. Please include any comments or reactions of yourself and others to the Title III Project that you care to.

____

____

____

WICHITA PUBLIC SCHOOLS
RESEARCH AND INFORMATION SERVICE DIVISION

ATTENDANCE INFORMATION AND RATING SHEET FOR TITLE III PUPILS

School ____________________ Date ____________________

Classroom ____________________ Teacher ____________________

Pupil's Name ____________________

Date Entered			Special Classroom Attendance		Regular Classroom Attendance		Date Withdrawn		
Mo.	Day	Year	Present	Absent	Present	Absent	Mo.	Day	Year

Please rate the growth or progress you have observed for the above named pupil.

	Much	Moderate	Slight	Little or None
1. Rate the growth in:				
a. Reading				
b. Spelling				
c. Arithmetic				
2. Positive change in attitude toward:				
a. Self				
b. School				
c. Others				
3. Growth or progress in the following:				
a. Study skills				
b. Physical skills				
c. Musical skills				
d. Artistic skills				

WICHITA PUBLIC SCHOOLS
RESEARCH AND INFORMATION SERVICE DIVISION

QUESTIONNAIRE TO TITLE III SUPPLEMENTARY CLASSROOM TEACHERS FOR EVALUATION OF THE 1967 - 68 TITLE III PROJECT

How would you rate the following services provided by the Special Education Diagnostic and Resource Center? If you did not receive a service, write "none" in the blank preceding the rating boxes.

1. Information you received in the following areas about pupils placed in your class.		Very Helpful	Helpful	Of Little Help	No Help	Detrimental
a. Reports centering on the students' interests.	____					
b. Personal habits of the students.	____					
c. School background of the students.	____					
d. Psychological "work-ups" on the students.	____					
e. Case history information.	____					
f. Social-life background.	____					
g. Scholastic achievement information.	____					
h. Placement and/or recommendations formulated by the Center staff.	____					
i. Re-staffing information at mid-year.	____					

2. Services provided by the Art Consultant in the following areas:

a. Appropriateness of project ideas.	____					

		Very Helpful	Helpful	Of Little Help	No Help	Detrimental
b. Providing lesson plans, instructions, and motivation for teacher.	______					
c. Providing motivation for the students.	______					
d. Supplying of materials.	______					
e. Time spent in classroom.	______					

3. Services provided by the Music Consultant in the following areas:

		Very Helpful	Helpful	Of Little Help	No Help	Detrimental
a. Appropriateness of materials.	______					
b. Use of musical instruments.	______					
c. Provision of lesson ideas and materials.	______					
d. Providing motivation for the students.	______					
e. Time spent in classroom.	______					

4. Services provided by the Physical Education Consultant in the following areas:

		Very Helpful	Helpful	Of Little Help	No Help	Detrimental
a. Appropriateness of games and exercises.	______					
b. Use of tests in the program.	______					
c. Provision of lesson plans and equipment.	______					
d. Providing motivation for the students.	______					
e. Time spent in classroom.	______					

5. Services provided by the Resource Consultant in the following areas:

		Very Helpful	Helpful	Of Little Help	No Help	Detrimental
a. Suggestions of appropriate materials.	____					
b. Explanation and/or demonstration of equipment or materials.	____					
c. Supplying materials and/or equipment.	____					
d. Time spent explaining services and/or equipment or materials.	____					

6. Place a check in the box to the right of each in-service training program or workshop you attended this year. Then rate the programs you attended on the same line that you check for attendance.

	DATE	PROGRAM		RATING Good	 Fair	 Poor
a.	9-14-67	Music Therapy & Use of Music with Exceptional Children	☐	☐	☐	☐
b.	9-21, 22, & 23	Frostig Materials	☐	☐	☐	☐
c.	9-28-67	Language Master Cards	☐	☐	☐	☐
d.	10-4 & 5	Resource Workshop for Secondary People (Language Arts, Social Studies, & Science	☐	☐	☐	☐
e.	10-13-67	Secondary Resource Materials Seminar (Language Arts, Social Studies, & Science)	☐	☐	☐	☐
f.	10-17-67	Follow-up Frostig Materials	☐	☐	☐	☐
g.	10-19-67	Follow-up Frostig Materials	☐	☐	☐	☐
h.	11-21-67	Follow-up Frostig Materials	☐	☐	☐	☐
i.	11-21-67	Developmental Visual Perceptions	☐	☐	☐	☐

				Good	Fair	Poor
j.	1-30 & 31-68	The Subordination of Teaching & Learning	☐	☐	☐	☐
k.	1-30-68	Education for Sexuality (County & Parochial)	☐	☐	☐	☐
l.	2-12-68	Administrators Seminar - Education for Sexuality	☐	☐	☐	☐
m.	2-13-68	Teachers Seminar - Education for Sexuality	☐	☐	☐	☐
n.	2-14-68	Counselors Seminar - Education for Sexuality	☐	☐	☐	☐
o.	2-15-68	Nurses Seminar Education for Sexuality	☐	☐	☐	☐
p.	2-23 & 24	Reading Improvement K-12	☐	☐	☐	☐
q.	2-29-68	Speech and Language Disturbances	☐	☐	☐	☐

For each of the following questions, give a brief statement or comment for each.

7. Are students in your classroom capable of being phased back into the regular classroom? If so, about what is the average length of time for the type of student assigned to you to be ready to return to regular class?

____

8. How have the following people reacted to your special Title III classroom and program?

a. building principal_______________________________

____

b. other teachers in your building______________________

____

c. other pupils in your building_______________________

____

d. parents of pupils in your class______________________

____

e. others (include people from outside the project area, if any____

____

9. Please include any other comments or reactions of yourself and others that you care to, regarding the Center or your classroom.

____

____

____

APPENDIX B

TABLED INFORMATION

APPENDIX B

List of Kinds of Materials Checked Out From Diagnostic Center by Teachers in Title III Program

School Housing Two Hearing Handicapped Rooms

Addison-Wesley-Math; Primer, Book 1, Book 2
Clock Dial
Day by Day Calendar
Experience With Language - Level I
Four Seasons With Suzy - Follett
Hayes Pre-Primer
Kenworthy's Self Teaching - Grades 1 to 4
Lift Off, Manual, Cycle I
Light & Shadow (Teacher's Edition)
Living Things (Teacher's Edition)
Manipulative Arts - Grade 1
Manipulative Arts - Grade 4
My Alphabet Book (Merrill)
Open Court Manual
Peter Pan - Fun With Numbers
Phonetic Quizmo
Phonics in a Nutshell - Unit I
Pictures That Teach & Guide
Pudgy - Record & Book
Puppets - Nurse & Doctor
Science Kit - Earth & Sun
Science Kit - Hot & Cold
Slides on Fire Prevention
S.R.A. - Cycle II - 1 & 2
Stern's Math - one hundred books & forms, ten pattern boards, ten unit books, counting board, nesting boxes, Teacher's Manual (Kindergarten Level)
Structural Math - I, Teacher's Manual
Squeaky - Record and Book
Unit Blocks
Unit Blocks - Number Board & Symbol Board

There were forty-four different materials listed as checked out, including Title III teachers and others. Eight of these items were library books.

School Housing Emotionally Disturbed Room (Grades 3 and 4)

Classical Fairy Tales
Language Stimulation Program - Set III
My Alphabet
Our ABC's

School Housing Emotionally Disturbed Room (Grades 3 and 4) (cont.)

Our Print Letters

List of fourteen items checked out, including Title III teachers and others.

School Housing Elementary Underachievers Room (Grade 6)

For Those Who Wonder
How to be a Better Student
Invitation to Thinking & Doing, one each, Teacher's Edition
Programmed Geography II
Books:
    Evans of the Army
    Gang Girl
    Gracie
    The Negro in America, three each
    Painting in the Classroom
    Roar of Engines
    The Search for Christina
    Shy Girl
    Ways With Art
Record: The Beautiful Blue Danube - Strauss

Forty-eight items listed as checked out, including Title III teachers and others. Sixteen of these items were library books.

School Housing Emotionally Disturbed Room (Junior High)

English Development Program - Set I
English Development Program - Set II
Laidlaw Arithmetic, 4 & 6
Microscope & slides
Programmed Geography, Teacher's Manual
Records:
    Semper Fidelis - The Marches of J. P. Sousa
    Teaching Children Values I
Viewlex 3288
Vocabulary Program - Set I, II, III
Books:
    Abe Lincoln, Frontier Boy
    John F. Kennedy, Young Statesman
    You and They
    Harr Wagner Set + one Teacher's Manual
        Frogmen in Action
        The Pearl Divers
        Rocket Divers
        The Sea Hunt
        Submarine Rescue
        Treasure Under the Sea
        Whale Hunt

Thirty items listed as checked out, including Title III teachers and others. Twenty were library books.

School Housing Two Learning Disabilities Rooms (Elementary Level)

Design Blocks
Flash X
Hear-Say-See; nine workbooks; Phonics record
Language Master Phonics - one set, Number II
Language Master Cards
    Set I - Blending & Beginning Phonetic Skills
    Set I - Phrases - Language Stimulation Program
    Set I - Nouns - Everyday Things
Math Readiness - Instructo 211
Merrill-Universal Phonics Workbooks 1, 2A, 2B, 3A, 3B, 4B
On to Good Writing
Phonics in a Nutshell, Unit 2 and 3
Phonics Skilltext - a, b, c, and d
Programmed Reading - Books 2 and 3
Sullivan Associates Programmed Reading Book 4 - three each
Sullivan Associates Programmed Reading Book 5 - three each
Structural Math - Teacher's Edition 2
Sullivan Readiness
    Three card sets (alphabet)
    Reading Books, first grade, four each
    Reading Books, third grade, one each

Thirty-three items listed as checked out, including TitleIII teachers and others. Eleven of these are library books.

School Housing Secondary Level Orthopedically Handicapped and Trainable Mentally Handicapped

Language Master Cards
    One blank standard set
    One phonics set
Mixie the Pixie, 2A - nine each
Mixie the Pixie, 1A - 5A; five books, one each
Science
    Second grade level - Air - Manual & workbooks, equipment
    Sixth grade level - Electricity - Manual, workbooks, equipment
Sullivan Reader 5A
Sullivan, Series II, Book Number 5

Twenty-three items listed as checked out, including Title III teachers and others. Two of these are library books.

School Housing Learning Disabilities, Junior High Level

Addison-Wesley Text Book, first course
Language Master plus earphones and one set blank cards
Merrill Linguistic Reader 1, One Teacher's Edition
Merrill Linguistic Reader 3, One Teacher's Edition Workbook

School Housing Learning Disabilities, Junior High Level (cont.)

Merrill Linguistic Reader 4, One Teacher's Edition Workbook
Programmed Reading for Adults by McKown - Books 5, 6, & 7
Science
    Continuity of Life
    Life Process of Plants
    Light
Sullivan Reader 2, Camp by the Pond
Sullivan Reader 2A, The XYZ Gang
Sullivan Programmed Reading - 15, 16, 17, 20, & 21
Torchbearer Library I
Uni-Kit D - Social Studies Program

Thirty-three items listed as checked out, including Title III teachers and others. Ten of these were library books.

School Housing Two Elementary Emotionally Disturbed Rooms

Green Light, Go - Teacher's Guide
Green Light, Go - Teacher's Edition, Practice Book
Math Universal Practice Worksheets - Grades 2 & 3A
Milton Bradley Parquetry Design Blocks
Open Highways - Teacher's Edition
Score & Sequence, Leaflet, McGraw - Hill
Sullivan Readers - 3, 4, & 5
Sullivan Readers Workbooks 2, 3, 4, 5, 6, 7, 8, & 3A, 4A, 5A, 6A, 7A, 8A
Structural Arithmetic Leaflet
Tachist-O-Filmstrips - Arithmetic Practice
Teacher's Annotated Edition, Uptown, Downtown
Teacher's Guide to Uptown, Downtown
The Roberts English Series

Twenty-three items listed as checked out, including Title III teachers and others.

TABLE 1

DIAGNOSTIC AND EVALUATIVE DEVICES USED BY STAFF SCHOOL PSYCHOLOGISTS AND PSYCHOMETRIST

Evaluative

1. Wide Range Achievement Test (WRAT)
2. Goodenough-Harris Drawing Test (GHDT)
3. Peabody Picture Vocabulary Test (PPVT)
4. Hiskey-Nebraska Learning Aptitude Test

Diagnostic

1. Children's Personality Questionnaire
2. Cattell Infant Intelligence Scale
3. Rorschach Inkblots
4. IPAT Culture Free Intelligence Test
5. Junior-Senior High School Personality Questionnaire
6. Wechsler Intelligence Scale for Children*
7. Wechsler Adult Intelligence Scale*
8. Wechsler Pre-School, Primary Scale of Intelligence*
9. Binet, L-M*
10. Occupational Interest Inventory, (Intermediate grades to adult)
11. Bender Visual Motor Gestalt Test for Children*
12. California Abbreviated WISC
13. Illinois Test of Psycholinguistic Abilities*
14. Drawing Completion Test
15. Gesell Developmental Schedules Set
16. Slossen Intelligence Test*
17. Draw-a-Person Test
18. Frostig Test of Visual Perception*

* Most frequently used devices.

TABLE 2

PEABODY PICTURE VOCABULARY TEST RESULTS FOR LEARNING DISABILITIES - ELEMENTARY, LEVEL I

	Mental Age		IQ		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May
1	7-8	8-0	88	84	24	16
2	10-4	10-4	109	103	71	58
3	6-1	6-8	83	80	10	8
4	10-4	10-7	109	114	71	83
5	7-6	7-0	95	83	42	12
6	6-8	7-10	80	89	8	24
7	8-5	8-4	104	104	58	58
8	10-5	8-4	111	94	75	37
9	--	9-10	--	99	--	43

TABLE 3

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR LEARNING DISABILITIES - ELEMENTARY, LEVEL I

	Reading				Spelling				Arithmetic			
	G.E.		%ile		G.E.		%ile		G.E.		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	2.7	3.5	19	25	2.0	2.2	9	7	2.2	2.8	12	14
2	3.3	4.1	32	37	3.0	3.7	25	27	3.6	4.2	39	39
3	1.6	2.3	10	18	1.8	2.0	13	13	1.6	2.1	10	14
4	3.5	4.7	58	66	2.9	3.0	39	25	2.8	3.6	37	39
5	Kg.8	1.6	4	7	1.3	1.5	9	6	1.8	2.2	19	16
6	1.3	2.1	5	10	1.3	1.6	5	5	2.1	3.6	4	39
7	1.5	2.3	9	23	1.6	1.8	10	13	Kg.5	2.6	2	30
8	1.9	2.0	8	9	1.8	2.3	7	13	1.9	2.4	8	14
9	--	2.2	--	6	--	2.6	--	9	--	2.8	--	12

TABLE 4

PUPIL STANDARD SCORES ON WIDE RANGE ACHIEVEMENT TEST (WRAT), GOODENOUGH - HARRIS DRAWING TEST (GHDT), AND PEABODY PICTURE VOCABULARY TEST (PPVT), LEARNING DISABILITIES - ELEMENTARY, LEVEL I

	WRAT						GHDT						PPVT	
	Reading		Spelling		Arith.		Man		Woman		Self			
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	87	90	80	78	32	84	75	89	69	82	74	87	88	84
2	93	95	90	91	96	96	84	92	71	85	70	92	109	103
3	81	86	83	83	81	84	71	83	72	74	71	77	83	80
4	103	106	94	90	95	96	90	99	87	84	90	102	109	114
5	73	78	80	77	87	85	81	77	79	86	84	89	95	83
6	75	81	75	76	84	96	89	97	78	96	85	97	80	89
7	80	89	81	83	68	92	70	50	64	76	70	89	104	104
8	79	80	78	83	79	84	83	83	64	79	64	77	111	94
9	--	77	--	80	--	82	--	99	--	97	--	92	--	99

TABLE 5

TOTALS OF EVALUATION SCORES ON SET OF EIGHT PLATES BY ART CONSULTANT - ELEMENTARY - LEARNING DISABILITIES, LEVEL I

Pupil	Nov. Score	Feb. Score	Apr. Score	Total 3 Sets
1	31	28	34	93
2	16	17	16	49
3	--	19	20	39
4	19	17	20	56
5	21	15	26	62
6	--	--	28	28
7	27	23	29	79

TABLE 6

RESULTS OF AAHPER YOUTH FITNESS TEST FOR FIVE BOYS IN LEARNING DISABILITIES - ELEMENTARY, LEVEL I

	Pupil 1		Pupil 2		Pupil 3		Pupil 4		Pupil 5	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Pull-ups (number)	0	0	0	0	2	4	3	6	0	0
Sit-ups (number)	8	27	16	93	11	9	33	30	21	16
Shuttle Run (seconds)	11.9	14.1	9.4	14.4	11.7	14.1	10.6	13.1	13.9	12.8
Standing Broad Jump (inches)	44	50	28	48	29	45	40	52	30	33
50-yard Dash (seconds)	12.2	9.2	11.6	10.2	11.8	10.7	9.4	9.0	9.9	9.7
Softball Throw (feet)	21	33	55	55	40	46	55	56	38	25
600-yard Run-Walk (minutes)	1.83	1.80	2.80	2.76	2.62	2.15	2.77	2.42	2.78	1.97

TABLE 7

PEABODY PICTURE VOCABULARY TEST RESULTS FOR LEARNING DISABILITIES - ELEMENTARY, LEVEL II

	Mental Age		IQ		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May
1	7-3	8-9	69	82	2	11
2	10-2	--	87	--	16	--
3	12-1	13-8	104	111	64	77
4	8-9	9-4	98	95	47	34
5	12-1	10-7	115	96	84	38
6	10-0	11-0	80	89	6	26
7	10-10	10-10	109	98	71	48
8	10-10	10-2	98	91	46	26
9	8-7	8-4	90	87	26	23
10	12-3	10-5	106	90	67	22
11	12-3	12-2	102	101	62	61
12	10-7	10-4	95	89	37	18

TABLE 8

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR LEARNING DISABILITIES - ELEMENTARY, LEVEL II

	Reading				Spelling				Arithmetic			
	G.E.		%ile		G.E.		%ile		G.E.		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	1.8	2.2	2	3	2.0	2.6	2	4	3.0	3.2	6	7
2	2.1	--	2	--	2.0	--	1	--	3.2	--	5	--
3	3.5	4.2	7	13	2.2	2.7	2	3	2.1	3.6	2	7
4	4.7	4.8	66	53	3.5	3.5	37	25	3.2	3.6	30	27
5	2.1	2.5	5	4	2.2	2.0	6	2	3.0	3.0	13	6
6	6.2	7.5	25	42	3.7	4.0	4	5	2.9	2.9	2	2
7	1.9	2.3	4	3	1.7	1.8	4	2	2.4	2.6	7	4
8	1.6	2.0	1	2	1.7	2.3	1	3	2.4	2.8	3	5
9	2.0	2.9	6	13	1.8	2.6	5	9	2.4	3.6	9	21
10	3.0	3.0	6	4	2.6	3.0	4	4	3.6	4.5	10	16
11	2.0	2.0	1	1	1.5	2.6	1	2	3.0	3.9	4	6
12	Kg.	81.2	1	1	1.2	1.2	1	1	2.2	2.2	3	2

TABLE 9

PUPIL STANDARD SCORES ON WIDE RANGE ACHIEVEMENT TEST (WRAT), GOODENOUGH - HARRIS DRAWING TEST (GHDT), AND PEABODY PICTURE VOCABULARY TEST (PPVT), LEARNING DISABILITIES - ELEMENTARY, LEVEL II

	WRAT						GHDT						PPVT	
	Reading		Spelling		Arith.		Man		Woman		Self			
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	68	71	69	74	77	78	98	90	93	98	84	94	69	82
2	68	--	67	--	75	--	108	--	104	--	91	--	87	--
3	78	83	68	72	68	78	78	85	76	82	78	80	104	111
4	106	101	95	90	92	91	70	75	67	69	62	75	98	95
5	76	73	77	69	83	77	69	95	62	85	69	95	115	96
6	90	97	74	76	69	69	81	84	71	61	80	78	80	89
7	74	72	73	68	78	74	86	90	84	79	92	92	109	98
8	66	69	67	71	72	75	81	88	79	87	81	87	98	91
9	77	83	75	80	80	88	112	128	98	118	104	101	90	87
10	77	74	74	74	81	85	80	87	65	72	82	84	106	90
11	67	64	63	68	74	77	91	92	87	82	94	76	102	101
12	60	61	63	61	71	68	73	95	76	101	91	85	95	89

TABLE 10

TOTALS OF EVALUATION SCORES ON SET OF EIGHT PLATES BY ART CONSULTANT ELEMENTARY - LEARNING DISABILITIES, LEVEL II

Pupil	Nov. Score	Feb. Score	Apr. Score	Total 3 Sets
1	17	20	20	57
2	25	24	20	69
3	13	7	6	26
4	10	16	16	42
5	--	23	26	49
6	18	17	20	55
7	--	23	23	46
8	28	21	25	75
9	31	20	32	83
10	31	20	29	80

TABLE 11

RESULTS OF AAHPER YOUTH FITNESS TEST FOR LEARNING DISABILITIES CLASS - ELEMENTARY, LEVEL II

Pupil	Pull-ups (number) Fall	Pull-ups (number) Spring	Sit-ups (number) Fall	Sit-ups (number) Spring	Shuttle Run (seconds) Fall	Shuttle Run (seconds) Spring	Standing Broad Jump (inches) Fall	Standing Broad Jump (inches) Spring	50-Yard Dash (seconds) Fall	50-Yard Dash (seconds) Spring	Softball Throw (feet) Fall	Softball Throw (feet) Spring	600-Yard Run-Walk (minutes) Fall	600-Yard Run-Walk (minutes) Spring
1	0	2	16	22	13.9	11.3	37	64	10.1	8.6	70	70	2.29	2.23
2	2	-	33	--	11.1	--	45	--	9.6	--	80	--	1.43	--
3	0	0	0	9	12.8	13.4	43	43	9.8	8.8	42	40	1.59	1.54
4	0	0	29	19	15.6	16.3	23	34	13.0	12.0	21	19	2.58	2.50
5	1	0	24	41	11.9	14.9	41	4[illegible]	10.8	10.5	29	30	2.53	--
6	-	0	--	26	--	12.7	--	52	--	9.1	--	70	--	1.35
7	4	-	28	37	10.7	11.9	62	64	8.9	--	67	107	1.42	1.30
8	5	-	29	40	9.1	12.3	59	64	8.7	8.8	72	70	1.43	1.26
9	2	3	19	35	13.0	16.3	54	49	8.0	8.2	60	75	1.54	1.53
10	2	4	12	24	12.9	15.4	52	52	10.4	10.0	50	60	2.44	--
11	3	7	17	20	11.5	11.4	45	60	11.0	8.3	46	76	2.51	2.16
12	0	-	18	40	14.2	--	42	47	10.3	--	51	--	1.59	--

TABLE 12

PEABODY PICTURE VOCABULARY TEST RESULTS FOR LEARNING DISABILITIES - JUNIOR HIGH

	Mental Age		IQ		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May
1	13-11	15-5	100	107	52	75
2	10-10	11-4	88	89	22	26
3	10-0	9-4	80	78	6	5
4	15-9	15-9	105	99	65	44
5	12-10	14-8	95	99	42	44
6	18-0+	17-9	125	118	94	89
7	10-1	13-7	81	98	8	50
8	11-0	10-10	89	85	26	14
9	14-2	12-5	105	92	63	36
10	10-7	11-0	86	89	15	23
11	11-7	12-11	92	96	33	52
12	12-8	14-10	94	99	41	52

TABLE 13

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR LEARNING DISABILITIES - JUNIOR HIGH

	Reading				Spelling				Arithmetic			
	G.E.		%ile		G.E.		%ile		G.E.		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	1.8	2.0	1	1	2.2	2.2	1	1	3.4	2.9	3	1
2	4.6	4.6	8	8	4.6	4.9	8	10	5.7	5.7	18	18
3	3.5	- -	4	- -	4.0	- -	5	- -	3.4	- -	3	- -
4	7.1	7.9	23	27	4.3	4.9	4	5	4.4	5.7	4	8
5	8.1	9.9	45	61	4.0	5.5	4	9	3.4	4.4	3	4
6	12.8	14.1	98	99	11.6	10.8	94	82	7.7	9.0	47	58
7	5.0	6.2	12	19	4.3	5.2	7	10	2.9	3.9	2	4
8	4.4	5.2	7	13	3.7	4.6	4	8	3.4	5.3	3	14
9	1.7	1.3	1	1	2.2	2.6	1	1	3.4	3.9	3	4
10	4.6	4.6	7	8	3.3	3.7	3	4	2.9	2.9	2	2
11	6.3	7.1	25	30	6.8	8.1	32	45	5.3	6.5	14	23
12	5.2	6.3	8	14	4.3	4.6	4	5	4.4	3.9	4	3

TABLE 14

STANDARD SCORES ON WIDE RANGE ACHIEVEMENT TEST (WRAT), GOODENOUGH - HARRIS DRAWING TEST (GHDT), AND PEABODY PICTURE VOCABULARY TEST (PPVT), LEARNING DISABILITIES - JUNIOR HIGH

	WRAT						GHDT						PPVT	
	Reading		Spelling		Arith.		Man		Woman		Self			
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	61	60	64	62	71	66	94	89	72	86	92	89	100	107
2	79	79	79	81	86	86	75	73	69	72	75	73	88	89
3	73	- -	76	- -	72	- -	77	91	71	72	83	82	80	78
4	89	91	73	75	74	79	83	83	82	82	82	80	105	99
5	98	104	74	80	71	74	89	80	80	70	84	86	95	99
6	130	133	123	114	99	103	60	60	57	64	53	64	125	118
7	82	87	78	81	69	74	66	32	61	95	66	95	81	98
8	78	83	74	79	72	84	71	71	67	75	67	79	89	85
9	61	58	64	67	72	74	108	115	96	105	108	108	105	92
10	78	79	71	74	69	69	78	118	86	101	72	87	86	89
11	90	92	93	98	84	89	66	65	63	56	63	56	92	96
12	79	84	74	75	74	71	70	64	50*	58	50*	50*	94	99

*Scores recorded as 50 were reported less than 50.

TABLE 15

RESULTS OF AAHPER YOUTH FITNESS TEST FOR LEARNING DISABILITIES CLASS - JUNIOR HIGH LEVEL

Pupil	Pull-ups (number)		Sit-ups (number)		Shuttle Run (seconds)		Standing Broad Jump (inches)		50-Yard Dash (seconds)		Softball Throw (feet)		600-Yard Run-Walk (minutes)	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
1	-	0	--	55	--	10.9	--	71	--	8.0	--	108	--	1.93
2	0	0	40	60	11.6	10.7	40	47	8.8	8.0	92	95	2.15	2.25
3	0	0	43	81	10.7	9.2	59	56	7.6	7.8	80	80	2.17	2.03
4	2	-	63	--	10.4	--	64	--	8.1	--	95	--	2.20	--
5	3	3	43	60	10.6	10.6	58	67	8.5	8.1	91	99	2.67	2.33
6	-	-	32	--	11.8	11.8	61	49	8.5	8.6	70	92	2.75	2.88
7	-	-	--	20	--	12.3	--	52	--	9.5	--	51	--	3.50
8	12	-	--	35	12.2	12.5	36	60	9.1	9.3	53	60	2.97	3.10
9	5	5	45	90	9.9	9.8	72	80	7.5	7.2	140	152	2.08	2.02
10	-	-	2	--	11.4	--	42	--	9.8	--	42	--	2.83	--
11	-	-	11	23	12.4	12.6	25	67	9.9	9.3	32	23	2.92	3.17

TABLE 16

RESULTS OF AAHPER YOUTH FITNESS TEST FOR PRE-SCHOOL HEARING HANDICAPPED

Pupil	Hanging Times (seconds)		Sit-ups (number)		Shuttle Run (seconds)		Standing Broad Jump (inches)		25-Yard Dash (seconds)		Softball Throw (feet)		200-Yard Run-Walk (minutes)	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
1	22	- -	2	1	17.5	16.2	13	18	9.3	- -	--	--	- -	- -
2	13.1	- -	1	--	18.4	16.4	10	20	9.4	- -	--	--	- -	- -
3	8.2	- -	1	0	21.0	16.5	11	23	10.0	- -	--	--	- -	- -
4	18	- -	--	--	19.8	- -	7	24	11.7	- -	--	--	- -	- -
5	- -	- -	--	0	- -	15.7	--	22	- -	- -	--	--	- -	- -
6	- -	- -	--	0	- -	18.9	--	11	- -	- -	--	--	- -	- -
7	- -	- -	--	--	- -	29.2	--	--	- -	- -	--	--	- -	- -
8	- -	- -	--	--	- -	25.5	--	5	- -	- -	--	--	- -	- -
9	2.5	- -	4	--	24.6	25.4	13	--	13	12.7	--	--	- -	- -

TABLE 17

RESULTS OF AAHPER YOUTH FITNESS TEST FOR PRIMARY HEARING HANDICAPPED

Pupil	Pull-ups (number)		Sit-ups (number)		Shuttle Run (seconds)		Standing Broad Jump (inches)		25-Yard Dash (seconds)		Softball Throw (feet)		200-Yard Run-Walk (minutes)	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
1	0	0	8	10	14.0	--	27	39	7.3	6.4	--	--	1.47	1.46
2	-	3	--	16	--	12.7	--	36	--	6.8	--	--	--	1.54
3	0	1	21	27	13.0	11.8	40	48	6.0	6.1	--	--	1.47	1.44
4	0	0	20	10	14.1	13.4	37	--	6.2	6.8	--	--	1.56	1.48
5	0	1	5	--	14.4	12.2	33	45	6.5	6.3	--	--	2.00	2.13

TABLE 18

PEABODY PICTURE VOCABULARY TEST RESULTS FOR TRAINABLE MENTALLY HANDICAPPED

Pupil	Mental Age		IQ	
	Oct.	May	Oct.	May
1	5-1	4-0	41	29
2	7-10	8-6	56	58
3	6-3	7-3	49	51
4	5-2	5-8	42	40
5	4-3	--	38	--
6	7-1	8-6	57	60
7	7-3	8-0	61	58
8	6-8	7-5	50	52
9	14-6	13-4	86	82
10	7-10	9-1	56	61
11	--	4-6	--	39

TABLE 19

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR TRAINABLE MENTALLY HANDICAPPED

	Reading				Spelling				Arithmetic			
	G.E.		S.S.		G.E.		S.S.		G.E.		S.S.	
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	1.0	1.5	56	59	1.6	1.3	59	58	Kg.2	Kg.6	52	54
2	2.0	2.2	61	62	2.6	2.6	64	64	1.0	1.5	56	59
3	1.7	1.8	59	60	1.9	1.9	60	60	Kg.6	1.0	54	56
4	Kg.2	Kg.1	52	52	1.6	1.6	59	59	N.9	N.9	46	46
5	2.4	--	61	--	2.6	--	63	--	Kg.8	--	53	--
6	4.4	4.6	73	74	4.0	4.3	71	72	1.5	1.9	58	60
7	1.7	2.0	58	59	2.2	2.2	61	60	Kg.8	1.5	53	57
8	Kg.2	Kg.3	52	53	1.0	1.3	56	58	Pk.2	Kg.2	47	52
9	2.6	2.2	64	62	3.0	3.0	66	66	1.0	1.9	56	60
10	1.5	1.5	59	59	1.9	2.2	60	62	Kg.6	Kg.8	54	55
11	1.1	--	55	--	1.9	--	60	--	1.0	--	54	--

TABLE 20

RESULTS OF AAHPER YOUTH FITNESS TEST FOR TRAINABLE MENTALLY HANDICAPPED

Pupil	Pull-ups (number)		Sit-ups (number)		Shuttle Run (seconds)		Standing Broad Jump (inches)		50-Yard Dash (seconds)		Softball Throw (feet)		600-Yard Run-Walk (minutes)	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
1	0	0	4	18	14.9	15.4	29	23	14.7	14.1	50	31	4.55	5.42
2	0	0	0	11	12.3	12.4	52	42	8.9	9.2	89	62	4.15	4.30
3	0	2	18	39	14.6	11.5	43	37	9.6	8.8	89	68	3.47	4.21
4	0	0	3	13	14.7	13.5	33	42	9.5	11.2	60	70	5.14	4.17
5	-	0	--	14	--	16.3	--	51	--	8.8	--	72	--	4.48
6	0	0	0	0	17.5	17.4	10	8	14.8	14.1	19	13	5.55	--
7	1	2	18	22	12.0	11.7	57	47	6.7	7.6	91	91	3.40	2.44
8	0	0	7	14	12.5	11.2	34	34	9.5	9.0	146	131	4.10	4.21
9	0	0	5	10	22.2	17.8	17	31	24.6	14.4	11	20	6.27	--
10	1	8	9	15	12.3	11.1	48	52	8.5	7.8	108	113	3.59	3.13

TABLE 21

PEABODY PICTURE VOCABULARY TEST RESULTS FOR EMOTIONALLY DISTURBED, GRADES THREE AND FOUR

Pupil	Mental Age Oct.	 May	IQ Oct.	 May	%ile Oct.	 May
1	9-5	10-7	96	96	38	38
2	8-7	11-0	90	96	26	53
3	10-4	[illegible]-7	102	74	53	3
4	12-1	10-9	115	108	84	71
5	8-11		100	97	50	38
6	10-5	7-10	111	82	75	13
7	--	[illegible]	--	72	--	2
8	--	12-2	--	118	--	89

TABLE 22

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR EMOTIONALLY DISTURBED, GRADES THREE AND FOUR

	Reading				Spelling				Arithmetic			
	G.E.		%ile		G.E.		%ile		G.E.		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	2.9	5.1	14	53	2.3	3.0	8	13	3.6	4.5	27	39
2	2.3	2.5	7	4	2.5	2.3	8	3	3.2	3.9	16	16
3	4.4	4.7	37	27	3.5	2.9	21	6	2.2	1.0	6	--
4	2.3	2.5	8	8	2.0	2.2	6	6	3.9	5.0	32	50
5	4.1	4.8	50	53	2.6	2.6	18	12	3.6	3.9	39	32
6	1.0	Kg.8	2	2	1.3	1.1	4	3	2.1	2.8	10	21
7	--	2.6	--	9	--	3.0	--	13	--	4.2	--	32
8	--	3.6	--	27	--	2.9	--	14	--	3.6	--	27

TABLE 23

GOODENOUGH - HARRIS DRAWING TEST RESULTS FOR EMOTIONALLY DISTURBED, GRADES THREE AND FOUR

	Man				Woman				Self			
	Standard Scores		%ile		Standard Scores		%ile		Standard Scores		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	77	105	6	63	71	100	3	50	75	107	5	68
2	79	79	8	8	70	74	2	4	79	79	8	8
3	85	85	16	16	81	91	10	27	85	-*	16	-*
4	92	93	29	32	75	84	5	14	79	87	8	19
5	105	97	63	42	91	85	27	16	105	105	63	63
6	82	80	12	9	57	96	1	39	75	77	5	6
7	- -	75	- -	5	- -	83	- -	13	- -	83	- -	13
8	- -	87	- -	19	- -	78	- -	7	- -	84	- -	14

*Pupil refused to take test.

TABLE 24

PUPIL STANDARD SCORES ON WIDE RANGE ACHIEVEMENT TEST (WRAT) GOODENOUGH - HARRIS DRAWING TEST (GHDT), AND PEABODY PICTURE VOCABULARY TEST (PPVT) EMOTIONALLY DISTURBED, GRADES THREE AND FOUR

	WRAT						GHDT						PPVT	
	Reading		Spelling		Arith.		Man		Woman		Self			
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	84	101	79	83	91	96	77	105	71	100	75	107	96	96
2	78	73	79	72	85	85	79	79	70	74	79	79	90	96
3.	95	91	88	77	77	61	85	85	81	91	85	--*	102	74
4	79	79	77	77	93	100	92	93	75	84	79	87	115	108
5	100	101	86	82	96	93	105	97	91	85	105	105	100	97
6	70	68	73	71	81	88	82	80	57	96	75	77	111	82
7	- -	30	- -	83	- -	93	- -	75	- -	83	- -	83	- -	72
8	- -	91	- -	84	- -	91	- -	87	- -	78	- -	84	- -	118

*Pupil refused to take test.

TABLE 25

RESULTS OF AAHPER YOUTH FITNESS TEST
FOR EMOTIONALLY DISTURBED - GRADES THREE AND FOUR

Pupil	Pull-ups (number)		Sit-ups (number)		Shuttle Run (seconds)		Standing Broad Jump (inches)		50-Yard Dash (seconds)		Softball Throw (feet)		600-Yard Run-Walk (minutes)	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
1	-	1	--	7	--	13.4	--	39	--	9.5	--	37	--	3.47
2	1	-	15	27	16.5	--	44	53	[illegible]	--	55	--	4.37	--
3	-	0	--	[illegible]	--	14.2	--	[illegible]	--	[illegible]	--	40	-	[illegible]
4	[illegible]	0	25	[illegible]	14.6	11.2	47	[illegible]	[illegible]	[illegible]	[illegible]	70	[illegible]	4.1
5	[illegible]	-	20	--	13.5	--	43	--	[illegible]	--	56	--	[illegible]	--
6	0	0	4	3	18.2	21.0	36	41	10.5	10.2	50	43	[illegible]	4.30
7	-	0	--	9	--	15.4	--	--	--	--	--	38	--	--
8	2	2	25	31	14.8	13.1	47	52	8.7	8.6	89	60	3.44	3.45
9	-	0	--	--	--	15.4	--	--	--	10.5	--	27	--	3.53

TABLE 26

PEABODY PICTURE VOCABULARY TEST RESULTS FOR EMOTIONALLY DISTURBED, GRADES FIVE AND SIX

	Mental Age		IQ		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May
1	7-6	8-0	68	69	2	1
2	11-0	- -	100	- -	51	- -
3	11-0	10-7	96	91	40	27
4	11-9	10-7	99	86	50	15
5	9-5	10-5	83	90	11	22
6	11-4	11-11	98	100	45	58
7	12-3	12-2	102	101	62	61
8	10-5	10-4	94	93	32	30
9	12-3	15-3	102	119	62	89
10	- -	8-0	- -	76	- -	6
11	- -	18-0+	- -	158	- -	99

TABLE 27

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR EMOTIONALLY DISTURBED, GRADES FIVE AND SIX

	Reading				Spelling				Arithmetic			
	G.E.		%ile		G.E.		%ile		G.E.		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	5.4	6.6	19	32	3.7	4.3	5	7	3.9	5.3	6	14
2	5.1	- -	32	- -	3.9	- -	14	- -	3.2	- -	7	- -
3	4.7	7.3	18	53	3.7	5.5	8	21	4.7	6.3	18	34
4	4.4	5.8	9	19	3.7	4.6	5	9	2.9	2.9	2	2
5	2.6	2.6	3	2	2.3	3.0	2	3	3.0	4.4	4	9
6	1.9	2.4	1	1	1.8	2.6	1	2	4.2	6.1	3	30
7	2.0	2.0	1	1	1.5	2.6	1	2	3.0	3.9	4	6
8	2.5	2.9	4	5	3.9	2.5	16	4	4.2	5.0	19	30
9	5.5	5.6	30	23	4.5	4.0	16	7	4.7	6.7	18	39
10	- -	3.6	- -	12	- -	2.7	- -	5	- -	3.9	- -	16
11	- -	14.1	- -	99	- -	6.8	- -	53	- -	5.5	- -	30

TABLE 28

GOODENOUGH - HARRIS DRAWING TEST RESULTS FOR EMOTIONALLY DISTURBED, GRADES FIVE AND SIX

	Man				Woman				Self			
	Standard Scores		%ile		Standard Scores		%ile		Standard Scores		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	80	87	9	19	78	86	7	18	82	89	12	23
2	102	- -	55	- -	82	- -	12	- -	90	- -	25	- -
3	69	75	2	5	66	74	1	4	70	83	2	13
4	66	72	1	1	56	60	1	1	57	66	1	1
5	73	72	4	3	73	64	4	1	76	71	5	3
6	98	111	45	77	90	108	25	71	94	116	34	86
7	91	92	27	29	87	82	19	12	94	76	34	5
8	105	92	63	29	90	87	25	19	99	83	47	13
9	84	96	14	39	73	82	4	12	81	96	10	39
10	- -	87	- -	19	- -	85	- -	16	- -	87	- -	19
11	- -	97	- -	42	- -	101	- -	53	- -	83	- -	13

TABLE 29

PUPIL STANDARD SCORES ON WIDE RANGE ACHIEVEMENT TEST (WRAT) GOODENOUGH - HARRIS DRAWING TEST (GHDT), AND PEABODY PICTURE VOCABULARY TEST (PPVT) EMOTIONALLY DISTURBED, GRADES FIVE AND SIX

	WRAT						GHDT						PPVT	
	Reading		Spelling		Arith.		Man		Woman		Self			
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	87	93	75	78	77	84	80	87	78	86	82	89	68	69
2	93	- -	84	- -	78	- -	102	- -	82	- -	90	- -	100	- -
3	86	101	79	88	86	94	69	75	66	74	70	83	96	91
4	80	87	75	80	70	69	66	72	56	60	57	66	99	86
5	71	68	69	71	74	80	73	72	73	64	76	71	83	90
6	66	66	65	68	83	92	98	111	90	108	94	116	98	100
7	67	64	63	68	74	77	91	92	87	82	94	76	102	101
8	73	76	85	73	87	92	105	92	90	87	99	83	94	93
9	92	89	85	78	86	96	84	96	73	82	81	96	102	119
10	- -	82	- -	75	- -	85	- -	87	- -	85	- -	87	- -	76
11	- -	153	- -	101	- -	92	- -	97	- -	101	- -	83	- -	158

TABLE 30

RESULTS OF AAHPER YOUTH FITNESS TEST FOR EMOTIONALLY DISTURBED - GRADES FIVE AND SIX

Pupil	Pull-ups (number) Fall	Pull-ups (number) Spring	Sit-ups (number) Fall	Sit-ups (number) Spring	Shuttle Run (seconds) Fall	Shuttle Run (seconds) Spring	Standing Broad Jump (inches) Fall	Standing Broad Jump (inches) Spring	50-Yard Dash (seconds) Fall	50-Yard Dash (seconds) Spring	Softball Throw (feet) Fall	Softball Throw (feet) Spring	600-Yard Run-Walk (minutes) Fall	600-Yard Run-Walk (minutes) Spring
1	-	5	--	87	- -	9.8	--	--	- -	8.2	--	111	- -	2.15
2	-	-	--	59	- -	- -	--	60	- -	- -	--	65	- -	2.00
3	0	-	20	--	11.5	- -	45	--	10.1	- -	90	--	2.40	- -
4	0	-	25	--	12.2	- -	45	--	11.8	- -	61	--	4.02	- -
5	-	-	--	69	- -	- -	--	40	- -	9.2	--	82	- -	- -
6	0	-	11	--	12.0	- -	54	--	11.2	- -	40	--	3.15	- -
7	0	0	8	20	16.3	16.0	26	39	15.5	13.5	32	32	7.00	5.39
8	-	-	--	30	- -	- -	--	--	- -	9.5	--	78	- -	2.27
9	0	-	20	--	13.5	- -	57	--	12.1	- -	59	--	4.00	- -

TABLE 31

PEABODY PICTURE VOCABULARY TEST RESULTS FOR EDUCABLE MENTALLY HANDICAPPED - EMOTIONALLY DISTURBED, AGES 9 - 11

Pupil	Mental Age Oct.	Mental Age May	IQ Oct.	IQ May	%ile Oct.	%ile May
1	8-11	8-9	100	90	50	27
2	7-10	8-2	74	73	5	3
3	7-6	9-4	71	86	3	16
4	7-10	7-7	84	74	18	3
5	7-3	- -	69	- -	2	- -
6	6-8	6-10	74	74	4	3
7	- -	7-3	- -	67	- -	2
8	- -	6-10	- -	81	- -	10

TABLE 32

WIDE RANGE ACHIEVEMENT TEST RESULTS FOR EDUCABLE MENTALLY HANDICAPPED - EMOTIONALLY DISTURBED, AGES 9 - 11

	Reading				Spelling				Arithmetic			
	G.E.		%ile		G.E.		%ile		G.E.		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	2.3	2.5	13	10	1.5	2.2	5	7	Kg.9	2.1	2	6
2	Kg.2	Kg.2	1	1	Kg.4	Kg.9	1	1	N.5	Kg.1	1	1
3	Kg.2	Kg.2	1	1	1.2	1.2	1	1	Kg.7	Kg.4	1	1
4	1.9	1.9	4	2	1.4	1.5	2	1	1.6	1.4	3	1
5	Kg.7	- -	1	- -	1.2	- -	1	-	1.9	- -	2	-
6	2.5	2.4	10	7	2.2	2.3	7	7	2.4	2.4	9	7
7	- -	3.2	- -	3	- -	2.2	- -	1	- -	1.5	- -	1
8	- -	1.4	- -	5	- -	1.2	- -	4	- -	1.6	- -	7

TABLE 33

GOODENOUGH - HARRIS DRAWING TEST RESULTS FOR EDUCABLE MENTALLY HANDICAPPED - EMOTIONALLY DISTURBED, AGES 9 - 11

	Man				Woman							
	Standard Scores		%ile		Standard Scores		%ile		Standard Scores		%ile	
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	59	77	1	6	59	69	1	2	62	72	1	3
2	69	70	2	2	62	55	1	1	66	68	1	2
3	82	80	12	9	72	68	3	2	75	77	5	6
4	70	67	2	1	62	62	1	1	72	72	3	3
5	72	- -	3	- -	66	- -	1	- -	67	- -	1	- -
6	80	79	9	8	75	72	5	3	82	86	12	18
7	- -	75	- -	5	- -	74	- -	4	- -	75	- -	5
8	- -	75	- -	5	- -	76	- -	5	- -	85	- -	16

TABLE 34

PUPIL STANDARD SCORES ON WIDE RANGE ACHIEVEMENT TEST (WRAT) GOODENOUGH - HARRIS DRAWING TEST (GHDT), AND PEABODY PICTURE VOCABULARY TEST (PPVT) EDUCABLE MENTALLY HANDICAPPED - EMOTIONALLY DISTURBED, AGES 9 - 11

	WRAT						GHDT						PPVT	
	Reading		Spelling		Arith.		Man		Woman		Self			
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	83	81	75	78	69	77	59	77	59	69	62	72	100	90
2	55	54	57	59	42	53	69	70	62	55	66	68	74	73
3	55	55	63	63	59	57	82	80	72	68	75	77	71	86
4	74	68	70	65	72	64	70	67	62	62	72	72	84	74
5	59	- -	63	- -	68	- -	72	- -	66	- -	67	- -	69	- -
6	81	78	78	78	80	78	80	79	75	72	82	86	74	74
7	- -	72	- -	65	- -	60	- -	75	- -	74	- -	75	- -	67
8	- -	76	- -	74	- -	78	- -	75	- -	76	- -	85	- -	81

TABLE 35

RESULTS OF AAHPER YOUTH FITNESS TEST
FOR EDUCABLE MENTALLY HANDICAPPED - EMOTIONALLY DISTURBED, AGES 9 - 11

Pupil	Pull-ups (number)		Sit-ups (number)		Shuttle Run (seconds)		Standing Broad Jump (inches)		50-Yard Dash (seconds)		Softball Throw (feet)		600-Yard Run-Walk (minutes)	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
1	0	0	4	12	20.0	18.0	19	35	16.0	14.2	15	30	4.29	3.46
2	-	4	--	33	--	11.1	--	--	--	9.4	--	58	--	4.18
3	0	0	0	--	16.0	13.3	17	21	14.6	13.2	47	--	[illegible]	--
4	-	3	--	44	--	15.6	--	45	--	10.1	--	--	--	--
5	0	0	3	10	15.3	13.3	25	24	14.6	13.2	47	60	6.18	4.05
6	1	-	12	--	12.3	--	43	--	10.8	- -	82	--	3.30	--
7	-	0	--	17	--	14.4	--	--		9.7	--	--	--	--

TABLE 36

PUPIL STANDARD SCORES ON WIDE RANGE ACHIEVEMENT TEST (WRAT), GOODENOUGH-HARRIS DRAWING TEST (GHDT), AND PEABODY PICTURE VOCABULARY TEST (PPVT) EMOTIONALLY DISTURBED - JUNIOR HIGH

	WRAT						GHDT						PPVT	
	Reading		Spelling		Arith.		Man		Woman		Self			
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Oct.	May
1	82	100	74	85	[illegible]	[illegible]	60	63	53	54	62	63	79	75
2	134	144	120	130	98	94	85	74	78	69	83	73	122	134
3	--	78	--	76	--	76	--	67	--	64	--	60	--	88
4	--	135	--	100	--	[illegible]	--	94	--	99	--	94	--	121
5	--	85	--	78	--	75	--	70	--	69	--	75	--	87

TABLE 37

FREQUENCY OF TEACHER RATINGS EMOTIONALLY DISTURBED - JUNIOR HIGH

Please rate the growth or progress you have observed for each pupil

	Frequency of Rating			
	Much	Moderate	Slight	Little or None
1. Growth in:				
a. Reading	1	0	3	3
b. Spelling	1	0	2	4
c. Arithmetic	2	1	1	2
2. Positive change in attitude toward:				
a. Self	2	1	2	2
b. School	2	1	1	3
c. Others	2	1	1	3
3. Growth or program in the				
a. Study Skills	0	4	1	2
b. Physical Skills	0	2	1	4
c. Musical Skills	1	1	4	1
d. Artistic Skills	0	4	1	2

TABLE 38

PUPIL STANDARD SCORES ON WECHSLER INTELLIGENCE SCALE FOR CHILDREN, WIDE RANGE ACHIEVEMENT TEST, AND PEABODY PICTURE VOCABULARY TEST - NEGRO UNDERACHIEVERS, GRADE SIX

	WRAT						PPVT		WISC
	Reading		Spelling		Arith.				
Pupil	Oct.	May	Oct.	May	Oct.	May	Oct.	May	Sept.
1	95	105	85	86	90	87	95	86	102
2	116	136	102	101	95	95	112	94	103
3	108	135	101	109	93	101	90	98	106
4	98	108	101	97	93	84	106	97	105
5	82	93	75	89	80	75	106	100	102
6	101	117	98	90	86	90	77	91	101
7	82	83	80	76	87	93	95	85	101
8	85	94	90	87	87	89	92	88	98
9	95	95	93	88	85	80	98	98	99
10	- -	94	- -	81	- -	86	- -	99	101
11	- -	74	- -	71	- -	70	- -	91	95

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TABLE 39

KRAUS-WEBER MINIMUM MUSCULAR FITNESS TEST RESULTS FOR HANDICAPPED PUPILS, AGE 3-5 - PARTIAL POINT SCORING METHOD

Pupil	Test 1 Fall	Test 1 Winter	Test 2 Fall	Test 2 Winter	Test 3 Fall	Test 3 Winter	Test 4 Fall	Test 4 Winter	Test 5 Fall	Test 5 Winter	Test 6 Fall	Test 6 Winter	Total Points Fall	Total Points Winter
1	1.0	1.0	1.0	0.0	C.5	0.0	1.0	C.1	0.5	0.0	0.0	0.0	4.0	1.1
2	0.3	0.0	0.0	0.0	0.4	0.0	1.0	0.0	0.6	0.0	1.0	C.0	3.3	0.0
3	1.0	---	0.0	---	1.0	---	1.0	---	1.0	---	1.0	---	5.0	---
4	---	1.0	---	1.0	---	1.0	---	0.6	---	0.5	---	0.0	---	4.1
5*	0.0	0.3	0.0	0.3	1.0	1.0	0.2	0.7	0.2	0.2	0.0	C.0	1.4	2.5
6	---	0.0	---	0.0	---	0.5	---	0.0	---	0.0	---	0.0	---	0.5
Mean Scores	0.6	0.3	0.3	0.3	0.7	0.5	0.8	0.3	0.6	0.1	0.5	0.0	3.4	1.4

* Results for Winter and Spring

TABLE 39 (continued)

KRAUS-WEBER MINIMUM MUSCULAR FITNESS TEST RESULTS FOR HANDICAPPED PUPILS, AGE 6-8 - PARTIAL POINT SCORING METHOD

Pupil	Test 1		Test 2		Test 3		Test 4		Test 5		Test 6		Total Points	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
1	1.0	1.0	1.0	1.0	1.0	0.5	1.0	0.7	1.0	1.0	1.0	1.0	6.0	5.2
2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0
3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.3	1.0	0.0	0.0	4.3	5.0
4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	0.0	1.0	4.5	6.0
5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0
6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	5.0	5.0
7	0.3	1.0	0.3	1.0	0.3	1.0	0.3	1.0	0.3	1.0	0.0	1.0	1.5	6.0
8	1.0	1.0	0.5	1.0	0.4	0.7	0.6	1.0	0.7	0.3	0.0	1.0	3.2	5.0
9	1.0	1.0	1.0	1.0	0.7	0.5	0.6	1.0	0.7	1.0	1.0	1.0	5.0	5.5
10	1.0	1.0	0.3	0.8	0.4	0.2	0.6	1.0	0.4	0.8	1.0	0.0	3.7	3.8
11	1.0	1.0	1.0	1.0	0.6	1.0	0.7	1.0	0.6	1.0	0.0	1.0	3.9	6.0
12	0.3	1.0	0.0	1.0	1.0	0.7	0.5	1.0	1.0	1.0	0.0	0.0	2.8	4.7
13	1.0	1.0	1.0	1.0	1.0	1.0	0.6	1.0	1.0	1.0	1.0	1.0	5.6	6.0
14	1.0	1.0	0.3	1.0	0.4	1.0	0.5	1.0	0.4	1.0	1.0	1.0	3.6	6.0
15	1.0	1.0	0.3	1.0	1.0	1.0	0.3	0.3	0.4	0.7	0.0	0.0	3.0	4.0
Mean Scores	0.9	1.0	0.7	1.0	0.8	0.8	0.7	0.9	0.7	0.9	0.5	0.7	4.3	5.3

TABLE 39 (continued)

KRAUS-WEBER MINIMUM MUSCULAR FITNESS TEST RESULTS FOR HANDICAPPED PUPILS, AGE 9-11 - PARTIAL POINT SCORING METHOD

Pupil	Test 1		Test 2		Test 3		Test 4		Test 5		Test 6		Total Points	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
1	1.0	1.0	1.0	1.0	1.0	0.3	1.0	1.0	1.0	1.0	0.0	1.0	5.0	5.3
2	0.3	1.0	0.3	0.5	1.0	0.6	0.3	1.0	0.5	0.4	0.0	0.0	2.4	3.5
3	1.0	1.0	0.3	1.0	0.3	0.4	0.5	0.4	0.5	0.3	0.0	0.0	2.6	3.1
4	0.3	1.0	0.3	1.0	1.0	0.5	1.0	0.4	1.0	1.0	0.0	0.0	3.6	3.9
5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0
6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	5.0	6.0
7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.6	1.0	1.0	6.0	5.6
8	1.0	1.0	0.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	5.3	6.0
9	1.0	1.0	0.3	1.0	0.6	1.0	1.0	1.0	0.6	0.4	1.0	0.0	4.5	4.4
10	0.3	1.0	0.0	1.0	0.0	0.2	0.0	1.0	0.0	1.0	0.0	0.0	0.3	4.2
11	0.3	0.3	0.3	0.3	0.0	0.1	0.0	0.4	0.0	0.4	0.0	0.0	0.6	1.5
12	0.3	1.0	0.3	0.3	0.0	0.4	0.0	1.0	0.0	1.0	0.0	0.0	0.6	3.7
Mean Scores	0.7	0.9	0.5	0.8	0.7	0.6	0.7	0.9	0.6	0.8	0.3	0.4	3.5	4.4

TABLE 39 (continued)

KRAUS-WEBER MINIMUM MUSCULAR FITNESS TEST RESULTS FOR HANDICAPPED PUPILS, AGE 12-14 - PARTIAL POINT SCORING METHOD

	Test 1		Test 2		Test 3		Test 4		Test 5		Test 6		Total Points	
Pupil	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
1*	1.0	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	5.9	[illegible]
2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0
3*	1.0	1.0	1.0	1.0	0.6	0.9	1.0	1.0	0.8	1.0	1.0	1.0	5.4	5.9
4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6.0	6.0
5**	1.0	0.5	1.0	0.5	0.7	1.0	1.0	1.0	0.7	1.0	1.0	0.0	5.4	4.0
6*	1.0	1.0	0.3	1.0	1.0	0.4	0.7	0.4	0.7	0.6	1.0	0.0	4.7	3.4
Mean Scores	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	0.7	5.6	5.2

* Fall and Winter results

** Winter and Spring results

TABLE 39 (continued)

KRAUS-WEBER MINIMUM MUSCULAR FITNESS TEST RESULTS FOR HANDICAPPED PUPILS, AGE 15-21 - PARTIAL POINT SCORING METHOD

	Test 1		Test 2		Test 3		Test 4		Test 5		Test 6		Total Points	
Pupil	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
1	1.0	1.0	0.3	1.0	0.7	0.4	0.4	1.0	0.3	0.1	0.0	0.0	2.7	3.5
2	0.3	1.0	0.3	1.0	1.0	1.0	0.8	1.0	0.7	1.0	1.0	1.0	4.1	6.0
3	1.0	1.0	1.0	1.0	0.8	1.0	0.7	1.0	1.0	0.1	0.0	0.0	4.5	4.1
4	1.0	1.0	0.3	1.0	0.7	1.0	0.9	1.0	0.8	1.0	1.0	1.0	4.7	6.0
5	0.3	0.3	0.3	0.3	0.2	0.1	0.3	0.8	0.3	0.6	0.0	0.0	1.4	2.1
6	1.0	1.0	1.0	1.0	0.4	0.3	1.0	1.0	0.5	1.0	1.0	0.0	4.9	4.3
7	1.0	1.0	1.0	1.0	0.4	0.3	0.5	0.2	0.4	0.1	1.0	0.0	4.3	2.6
8	1.0	1.0	0.3	0.8	0.4	0.1	0.5	0.0	0.6	0.0	0.0	0.0	2.8	1.9
9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	6.0	5.0
Mean Scores	0.8	0.9	0.6	0.9	0.6	0.6	0.7	0.8	0.6	0.5	0.6	0.2	3.9	3.9

APPENDIX C

EXPERIMENT

A TECHNIQUE TO ASSESS THE PREFERENCE FOR INTENSITY OF MUSICAL STIMULI IN YOUNG HARD-OF-HEARING CHILDREN

Introduction

Accurate measurement of the degree of hearing loss in the young hard-of-hearing child has long presented a problem to those working with him in the public school setting. Retarded communication skills and inability to understand directions are basic problems which make the traditional means of testing neither effective nor feasible. Very frequently no audiogram is present in the child's records due to the inability to use this particular measurement. Teachers have no accurate means of knowing his degree of hearing loss.

Free operant techniques, which require minimal verbalization from the examiner and none from the child, often obtain a more reliable assessment than those requiring a verbal report from the child or verbal instructions from the examiner.

In the field of music therapy, several operant studies have supported observations that music can operate as a consequence to maintain given behaviors in children and adults. Jeffry[3] was able to increase responding in children with music. Rheingold, Stanley and Doyle[5] discovered that infants placed in infant seats increased their rate of hitting a suspended ball when music or television was presented regularly.

An operant procedure for determining the auditory preference of mental retardates was developed by Cotter and Toombs.[2] A metal box was designed containing three two-way toggle switches. Each switch produced a different type of auditory stimulus. Types of stimuli used were: children's music (nursery rhymes and children's songs), adult music (swing - Lester Lanin), electronic music, white noise, ambient noise, and electronic clicks at 300 per minute.. Auditory stimuli could be produced only by pushing or pulling any one of the three switches. In the normal, vertical position silence occurred. The amount of time each key was depressed (duration of commitment) was cumulatively recorded by behavioral research equipment. A significant result of the study was that contingent music functioned as a consequence which maintained responding in mentally retarded children. Twenty out of twenty subjects preferred music over noise. Seventeen out of twenty preferred children's music, two out of twenty preferred adult background music and one out of twenty preferred electronic music.

Another operant technique is conjugate assessment. This technique requires that a subject be placed in a room and shown that he can press a switch or one of a group of switches in order to see or hear something. A given number of continuous responses is necessary to hear or see the given stimulus. A study by Morgan and Lindsley[4] measuring preference for stereophonic over monophonic music using the conjugate technique supported the data obtained by Cotter and Toombs.[2] Four subjects were used. It was found that contingent music did function as a consequence which maintained responding. It also showed that stereophonic music was verbally preferred by four subjects over monophonic music, however, it was operantly operantly preferred by only two of the four.

Statement of Problem

The purpose of this study was to attempt to determine what decibel level of auditory stimuli (music) would maintain responding in young hard-of-hearing children. In other words, an attempt was made to determine what decibel level of music each child preferred. The following questions were answered:

(1) Will auditory stimuli (music) maintain key responding in young hard-of-hearing children?

(2) Which decibel level of music will maintain the longest duration of commitment for each child?

Experimental Design

Equipment

The following materials were used:

1. Four taperecorders (Wollensak - Model 1500)
2. Four reels tape
3. Rheem - Califone record player (Model 1810)
4. Earphones (Maico - Model F-1 1700)
5. Five stopwatches
6. Zenith Audiometer Calibration Check Unit (Model F-49633)
7. Scott Sound Level Meter (Model 412)
8. Three records of children's music
9. Stopwatch rack
10. Key box
11. Light box
12. Floor lamp

13. Stool
14. Black construction paper
15. Small table
16. Small chair
17. Kitchen timer

Four tapes of children's music were prepared in the usual manner. Each individual tape was calibrated with a Zenith Audiometer Calibration Check Unit. The volume control was manipulated until the reading of the meter stabilized at a given decibel range. The position of the volume control on the taperecorder was marked for future use. Tapes were calibrated at 90, 80, 70 and 60 decibels. The decibel range for each decibel level was as follows: 90 decibels - 85-95 decibels; 80 decibels - 75-85 decibels; 70 decibels - 65-75 decibels; 60 decibels - 55-65 decibels.

A sound level reading of the room where the study took place was taken with a Scott Sound Level Meter. Three readings taken at random times during the morning indicated sound levels of 44, 49 and 61 decibels.

Setting

The study took place in an observation room in one of the public schools. The room was approximately four and one-half feet by twenty feet. A partition extending half-way across the room divided the room in half. Each part of the room contained a one-way mirror, one facing west and the other facing east. Mirrors were covered with black construction paper. A table, chair, and key box were located in one half of the room, and four taperecorders, a stool, kitchen timer, stopwatches and rack, and light box were located in the other.

The children were seen individually for daily five-minute sessions. Upon entering the room they were seated at a table. On the table was a metal box containing five push-button keys. Six auditory inputs were located behind the key box, four leading to four tape recorders located in the other half of the room, one for the earphones, and one which was not connected, thus producing ambient noise. Also wired to the key box was a box which contained five red lights. This, like the taperecorders, was kept in the examiner's area. Depression of any one of four keys on the key box produced children's music. Each key produced this music at a different decibel level. One key produced ambient noise. The position of each decibel level and ambient noise on the key box was randomized daily. Each key in the normal undepressed position produced nothing. Depression of any one of the five keys caused one of the five corresponding red lights to become illuminated.

Subjects

Ten subjects, four males and six females, participated in the study. Six of the subjects were pre-school children, ages three to four. The remaining four were of kindergarten age. All children were considered to be of average or above average intelligence as measured by the Hiskey-Nebraska Learning Aptitude Test. Although free-field evaluations had been attempted with most of the subjects, no audiometric tests had been administered to the pre-school children. Two of the kindergarten subjects had had audiograms, however, both of these were labeled "questionable."

The study required that the subjects have a hearing loss as diagnosed by a medical physician, and that they were capable of making a push-button response.

Procedure

A typical session proceeded in the following manner. Each child was seated at the table and earphones were placed over his ears or ear. The examiner returned to the other half of the room and started the taperecorders and timer. Each time the child depressed a key, one of five red lights located near the examiner would come on.. The examiner, in turn, would begin one of five stopwatches, stopping it only when the light went out. The cumulative time spent depressing each key was assessed by reading each stopwatch at the end of the session, and recording it on an observation sheet.

The study was divided into either four, five or six phases, depending on the data obtained in each phase. Criterion for the termination of one phase and the beginning of the next consisted of the subject establishing a consistent pattern of responding. All subjects were examined first binaurally, then with right ear alone, left ear alone, and again binaurally. Some subjects, however, experienced phases in which one and two decibel levels of music were not available. Phases will be explained in detail in the Results section of this paper.

Analysis of Data

Total time spent at each key, as indicated on the stopwatch, was recorded on an observation sheet daily. This was also plotted graphically. The Friedman Two-Way Analysis of Variance by Ranks[1] was the statistical tool chosen to determine whether or not there was a significant difference in time spent at each decibel level. Only in one case, however, where the subject did not show an obvious preference, did this seem absolutely necessary. In all other cases a graph gave an excellent picture of what had occurred.

Results

Data from three subjects is discussed in this report. Evaluation of Subject A (Figure 1) was conducted in five phases. During the first phase earphones were placed over both ears. In the second phase an earphone was placed only over the right ear, and in the third phase an earphone was placed only over the left ear. In all three phases music at 90, 80, 70 and 60 decibels and ambient noise was available. It can be seen in Figure 1 that Subject A obviously preferred music at 90 decibels of intensity during Phases 1, 2 and 3. During Phase 4, earphones were again placed over both ears. However, music at 90 decibels was not available. In other words, two keys now produced ambient noise and the remaining three keys produced music at 80, 70 and 60 decibels. During Session 19, Subject A's responding showed a very different pattern from what was seen in earlier sessions. During Session 20, time spent at the key box decreased as compared to the time spent in the first three phases. An unstable pattern of responding was seen. Time spent in responding continually decreased in sessions subsequent to 20 and prior to 25. Subject A spent only 12.2 seconds responding during Session 24. The rest of the time was spent looking around the room, manipulating the ear molds, and attempting to turn the key box upside down. These behaviors did not occur in earlier sessions. In Phase 5 (Session 25) music at 90 decibels was reinstated. Conditions were identical to those in Phase 1. Again Subject A had a choice of music at 90, 80, 70 and 60 decibels. Time spent at the key box immediately increased and continued to increase in the following sessions. It would seem safe to conclude that Subject A preferred music at the 90 decibel level of intensity.

Subject B also appeared to prefer music at 90 decibels during the first three phases, although his attention span was shorter that that of Subject A (Figure 2). During the fourth phase when music at 90 decibels was not available, Subject B maintained responding but in a very unstable pattern. Since no decibel level maintained responding for more than one session, nothing can be concluded from the data of the fourth phase other than the child was not discriminating between any of the remaining stimuli. In Phase 5, however, when music at 90 decibels was reinstated, preference for this was again seen for five consecutive sessions.

Evaluation of Subject C was conducted in six phases. During the first, second and third phase, a preference for music at 90 decibels was seen (Figure 3). It was also observed that during Sessions 5, 8 and 9, considerable time was spent manipulating the key which produced music at 80 decibels. In the fourth phase when music at 90 deceibels was not available, Subject C spent 3:56, 4:09 and 4:52 in consecutive sessions depressing the key which produced music at the 80 decibel level of intensity. Time spent at other levels was very short. During the fifth phase neither 90 nor 80 decibel level music was available. In other words three keys now produced ambient noise while the remaining two produced music at the 70 and 60 decibel level of intensity. Though the time spent responding changed little for the subject, no consistent pattern was seen. On three occasions (Sessions 24,26,28) the subject spent approximately 3:52 at one of the keys which produced ambient noise. During the entire phase the subject was restless, moving frequently in her chair and looking around the partition at the examiner. This behavior did not occur in previous phases. However, responding was maintained no matter what else she was doing. During the sixth phase music at 80 and 90 decibels was reinstated. Conditions were identical to those of Phase 1. During Session 20 the subject spent 4:52 at the key which produced music at 80 decibels. However, in the four succeeding sessions music of the 90 decibel level of intensity was obviously preferred. It would seem safe to conclude that Subject C preferred music at 90 decibels. When this was not available, however, music at 80 decibels maintained responding for three consecutive sessions. Therefore it can be said that when music at 90 decibels was not available, music at 80 decibels was preferred.

Discussion

All subjects were able to make the key-pressing response except two. These two were unable to do so because of lack of strength in their fingers. A screw-driver was mounted on the key box in such a way that the child could depress any key by simply holding the handle of the screw-driver with his entire hand. It could easily be moved to the right or left.

A most interesting observation was made during the first part of the study. Little or no training was necessary for all of the subjects. Key-pressing behavior occurred immediately, in most instances with no instructions from the examiner. When a key was pressed which produced music which could be heard, all subjects responded by smiling or laughing at the examiner. Subjects came readily to each session with little prompting from the teacher. Very little hyperactivity was noted in children who were reported as being hyperactive in the classroom.

The teacher reported that the children became much more aware of sound as the study progressed. She considered it very valuable as auditory training, and as an aid in developing residual hearing.

It should be reported that the study was initially conducted with twelve subjects. Two of the subjects were discontinued after approximately fifteen sessions because it was believed that their hearing loss was severe enough to warrant the use of equipment which could transmit a sound stimulus of much greater intensity than the equipment used could do. The pattern of responding for both of the subjects consisted of going up and down the key box, pressing each key for a few seconds, releasing it, and going on to the next one.

Conclusions

Though it appeared that the study produced an accurate assessment of sound intensity preference (music), it should have immediately been followed up with operant audiometric procedures. It is also possible that traditional audiometry could have been used since subjects had had consistent exposure to earphones and sound during the course of the study. A comparison between an audiogram and the data obtained from the study is essential before definite conclusions can be drawn. Unfortunately, neither equipment nor personnel was available at the termination of the study to do this.

It can be concluded, however, that the data does support that obtained by Cotter,[2] Morgan,[4] Jeffry[3] and Rheingold.[5] Music of specified intensity did maintain responding in all subjects. This seems especially significant in this study. Though the subjects were hard-of-hearing and did not hear what the average person hears, and in the way that the average person hears, music was still a consequence which maintained responding.

Music occurs in continually changing frequencies and intensities. Its various components need to be isolated. This study should be replicated using complex filter equipment, which could, for instance, filter out the melody component and emphasize the rhythmical component in given musical selections. This would aid in isolating exactly to what the subjects are responding. In addition, more subjects, more sessions, and more phases (ex. Free-field) should be used in another study.

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FIGURE 1

TOTAL TIME AND TOTAL PERCENT OF TIME
SPENT AT EACH KEY PER SESSION

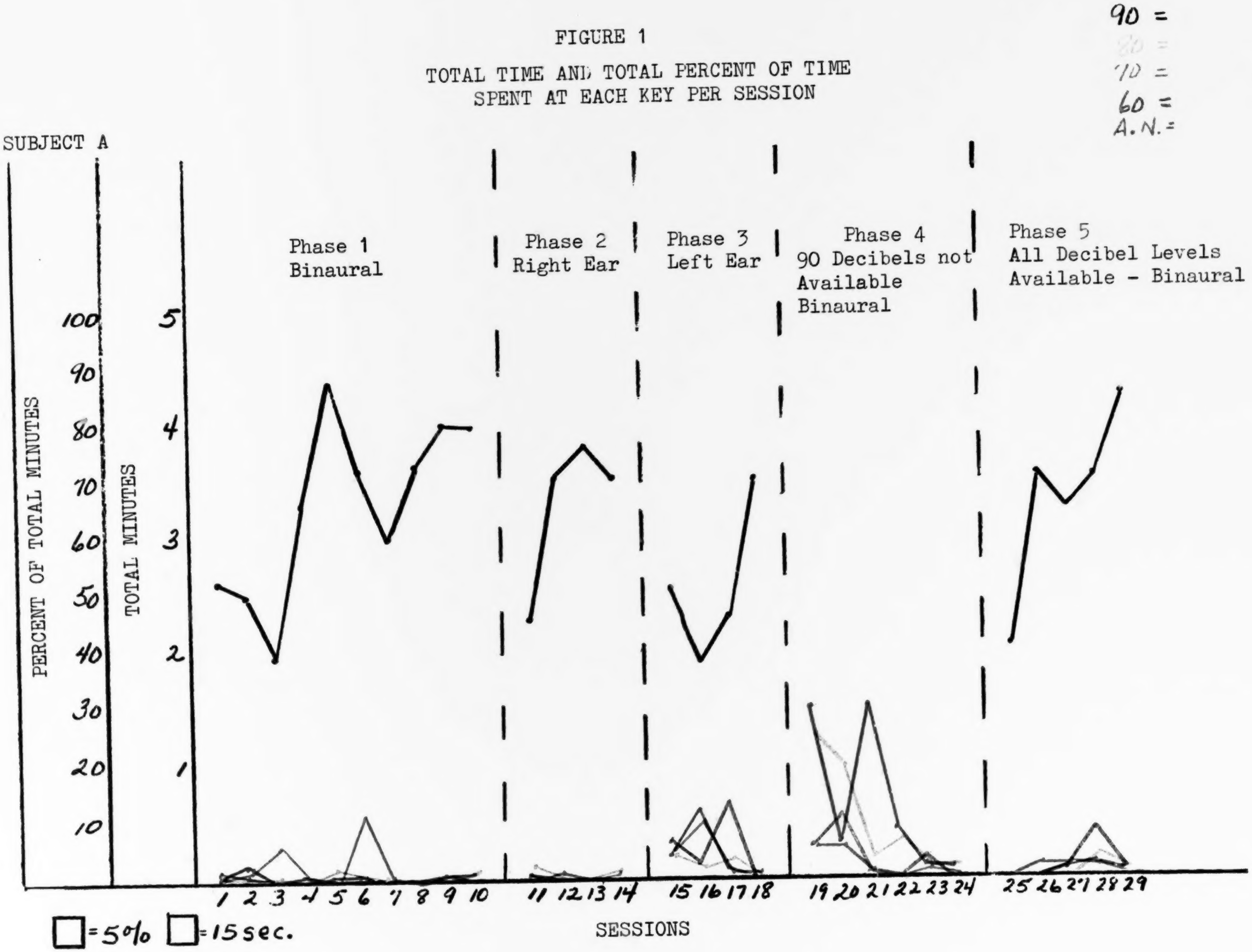

FIGURE 2

TOTAL TIME AND TOTAL PERCENT OF TIME
SPENT AT EACH KEY PER SESSION

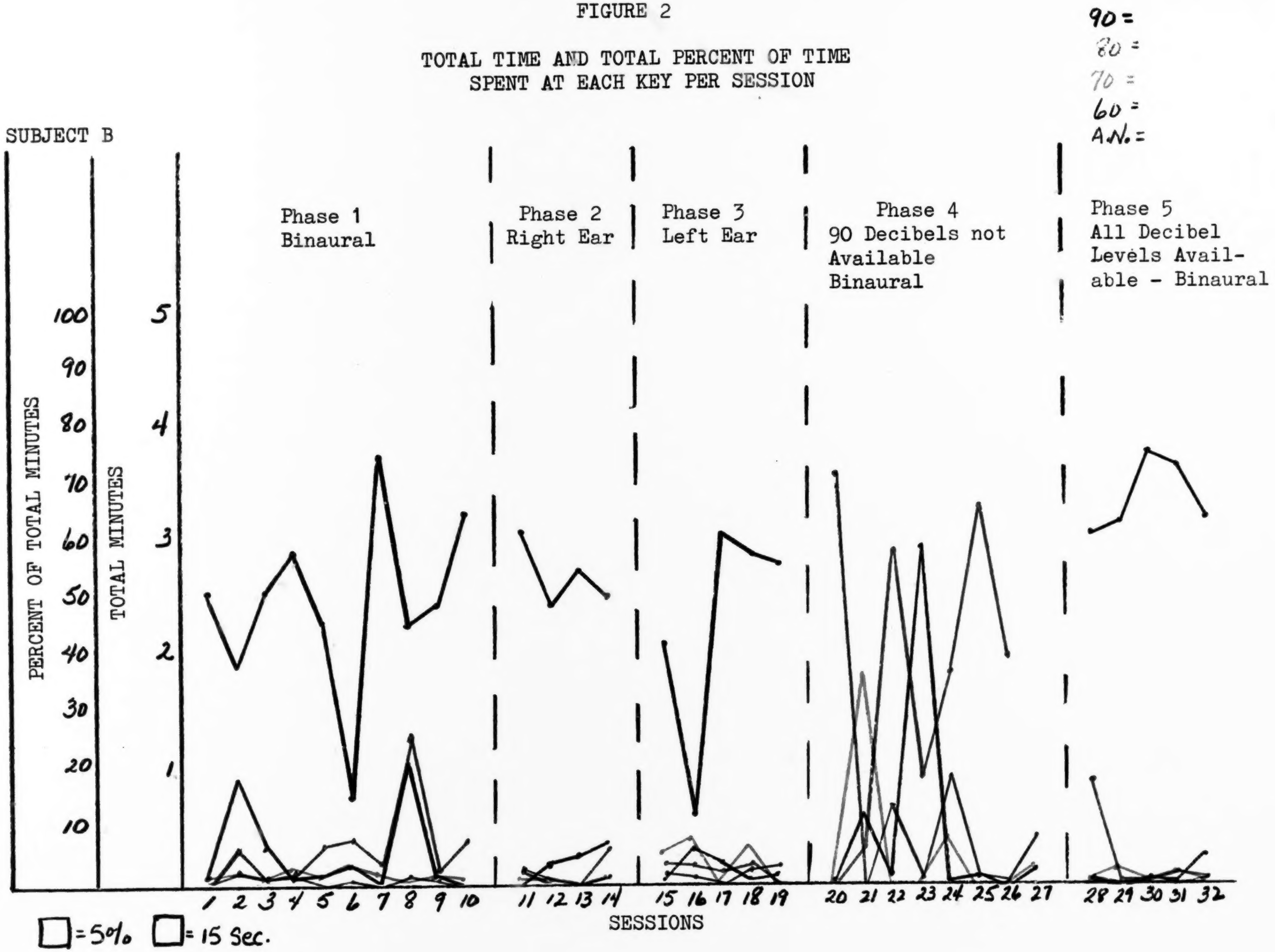

FIGURE 3

TOTAL TIME AND TOTAL PERCENT OF TIME SPENT AT EACH KEY PER SESSION